PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

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LECTURE II.

IRRITABILITY.

GENTLEMEN,—In my last lecture I explained to you some fundamental and all-important points regarding matter and energy—the two great factors with which chemists, physicists, and physiologists have to deal. We saw that we cannot create or destroy either matter or energy. Our gaseous and solid food consists of matter loaded with energy. The matter and the energy undergo various metamorphoses, and finally leave the body in states very different from those in which they entered it. The oxygen inspired chiefly combines with carbon and hydrogen to form carbonic acid and water; while the complex compounds introduced by the mouth are finally tumbled to pieces of simpler chemical structure, and leave the body as such. The energy enters the body as chemical energy stored up in the food; it passes through various transformations, and leaves the organism chiefly in the form of heat. When it enters the body it is silent and at rest; in other words, it is *potential*. Soon, however, it wakes up, shakes off its lethargy, and in its *actual* form may accomplish feats of, perhaps, nerve and muscular power which can startle the world.

We are now in a position to study *Irritability*. To do this we shall take the leg of a frog, with its sciatic nerve dissected out and detached from its connexion with the spinal cord, but still attached to the gastrocnemius and other muscles of the leg proper. With a pair of scissors I divide the spine in the dorsal region, then the muscles and skin of the abdomen, and remove the viscera. I now take hold of the lumbar vertebræ with one hand and the skin with the other, and forcibly separate the two, in order to denude the muscles. Lastly, I isolate the sciatic nerve everywhere, save at its terminations in the leg, and then remove the leg with the nerve by dividing the nerve close to the spine and the muscles and femur about the middle of the thigh. I fix the femur in a pair of forceps supported on a stand, placing the limb horizontal, with the gastrocnemius uppermost, so that you may all see the movements of the leg. I now pinch the free end of the nerve. The leg is moved. I pass electricity through the nerve. Again the leg moves. I now cut off the bit of nerve that I pinched, and dip the newly exposed section of the nerve into a solution of common salt. The leg moves again, but not so quickly as before. I now cut away the bit of nerve in contact with the salt, and hold this heated wire near the nerve-trunk. Once more the muscles of the leg are thrown into motion. Now, I have not been acting on the muscles directly, but have only been influencing them through the nerve. I have in these illustrations done something to this nerve that caused it to influence the muscles. But you will ask why you should believe that the muscles have just now been influenced only through the nerve. I will furnish the proof. I tie a thread firmly round the middle of the nerve. I now pinch the nerve on the side of the thread *furthest* away from the muscles; but my pinch is now powerless to affect the muscles; yet when I squeeze the nerve on the side of the ligature *nearest* the muscles the leg moves as it did before. You must, therefore, admit that in these experiments we have been acting on the muscles through the nerves, and that this power of the nerve to convey an influence to the muscles can be destroyed by a ligature tied round the nerve.

Here is another frog's leg, with the sciatic nerve prepared in the same manner. I pinch this nerve, but the leg remains motionless. I send electricity through the nerve; the result is equally negative. But you see that no thread has been tied round this nerve; it looks in every way just like the other when we began our experiment, and yet it refuses to do what the other did. You saw me remove the first from a living frog; this one was removed from a frog yesterday. Doubtless you will now say—"Oh, the one nerve is living, while the other is dead, and that explains the whole matter." True.

But now I want to show you that, if I apply to muscular tissue itself the various agents which I have applied to nerve, the muscles will move just as if the nerve had been acted upon. How shall we act on the muscular tissue directly without acting on the nerves? We must have no action on the nerves, else the experiment will not show what we desire. We will paralyse the nerves, and so render them incapable of affecting the muscles. I have here a solution of the Indian arrow poison named Curara. With the aid of Wood's syringe I inject a little under the skin of a living frog. It will speedily find its way into the blood, and will paralyse the peripheral terminations of the voluntary motor nerves. ..... You now see that the animal is motionless; it lies as if lifeless. I cut down on the sciatic nerve, isolate it, divide it high in the thigh, and now I pinch the end in connexion with the leg; no movement results. I electrify it; the leg lies motionless. The nerve seems to be dead. But I electrify the gastrocnemius, and you see that it instantly contracts. I pinch it, and it moves. I touch it with the heated wire; again it is convulsed. The poison has obviously paralysed the nerves, but not the muscles. You may, however, say—How do you know that your poison has palsied the very ends of the nerve-fibres? May there not be some portions of the nerves in connexion with the muscular fibres which have escaped the deadening influence of the poison? For reasons which I shall afterwards mention, this is unlikely; but I at once admit that I cannot consider your objection as devoid of importance. We turn to another mode of getting at what we want. I take a fresh unpoisoned sciatic nerve connected with the gastrocnemius. I cut off the tendo Achillis, and bring dilute ammonia in contact with the cut surface; the muscle at once contracts. I now cut a slice from the muscle so as to remove the part which has been touched with ammonia, and dip the cut surface of the sciatic nerve into the ammonia; the muscle remains at rest. But when I cut away the piece of nerve contaminated with the ammonia, and apply salt solution to a new piece of nerve, the muscle, as you see, contracts. Here, then, we have in ammonia a substance which throws muscle into contraction when applied to it directly, but not when applied to the nerve. This is a demonstration that we may act on the muscular *substance* directly, and thereby cause the muscle to move. This is quite what one would have expected, seeing that there are contractile tissues, such as the white blood-corpuscles, which may be thrown into motion without the intervention of nerves at any time.

I electrify another muscle, however. This one belongs to the leg removed from the body yesterday. It remains motionless, in spite of my electricity. Why? Because it is dead.

These facts show that, under certain conditions, nerve and muscle can by various means be made to evolve energy. The visible motion of the muscle is sufficient evidence of the evolution of energy within that structure. I shall, however, show you this in a more startling way. I attach a weight of 100 grammes to the tendo Achillis of this frog's gastrocnemius, and now I electrify the muscle. You observe that this weight—so heavy when you compare it with the size of the muscle—is lifted. Energy is the *power to do work*: here we have work in earnest. You cannot fail to be convinced that we have caused the muscle to evolve energy, but I fancy you may have doubts about the nerve. The muscle is extremely candid: it does something which impresses our sense of sight strongly enough. But the nerve is more subtle: we may apply all our senses to it—it refuses to affect them. Nevertheless we must admit that it evolves energy when, on pinching it, we find that it throws a muscle into motion. You notice that the muscle lies at rest until I excite the nerve, or the muscle itself. It is like a lucifer-match on a mass of gunpowder. It does not energise *spontaneously*, but its energy is dormant (potential) until some actual energy is brought to bear upon it, and then its dormant energy bursts forth. It would lie dormant for ever were its *evolution* (or transformation into actual energy) not set agoing by some actual energy. Therefore,

when I pinched the nerve, I must have caused the nerve to energise; for only in this way can it in turn cause the muscle to energise.

The store of energy in the nerve and muscle is by no means inexhaustible. Every time I excite the nerve or muscle I cause them to draw upon their stores of energy; and every time this is done there remains a smaller amount of energy at their command. The tissues have been removed from the source of their energy—the blood; and therefore they are compelled to spend their capital, as it were, when excited in this way. No doubt they can draw upon the oxygen of the air directly, and, although the nerve takes little of this, the muscle draws on it to a large extent. Even the muscle, however, must give in; for the energy of the oxygen is of no avail unless there be something with which the oxygen is to chemically combine. The supply of this in the muscle is of course limited. I shall show you that this nerve's energy can be exhausted. I arrange it so that it will be electrified for a considerable period of time. You see that the nerve is now throwing the muscle into violent contractions. Ere the demonstration close you will see the muscle at rest, although the nerve will be as powerfully electrified then as now.

Hitherto I have as much as possible abstained from technicalities. It is now, however, time that I should inform you that the various mechanical, electrical, thermal, and chemical manifestations of energy with which I have caused the nerve and muscles to act are termed excitants, irritants, or stimuli; and when these or any other forms of energy, such as sound, light, or mental energy, cause muscle or nerve to act, these tissues are said to be *irritable*, or to possess the property of irritability. Formerly it was fashionable to employ this term *irritability* only when speaking of muscle, and to use the word *excitability* when speaking of nerve. Such distinction is worse than useless, it is confusing. I advise you to consider these terms as synonymous, and therefore applicable to the same tissues.

But nerve and muscle are by no means the only tissues which possess irritability. All contractile tissues, all secreting tissues—in short, every living tissue, possesses more or less of it. In the histological section of this class you have seen what happens when the plasm of a cartilage cell or that of a white blood corpuscle is irritated. Visible motion is produced; the plasm contracts. In the case of the cartilage you have seen the effects of prolonged irritation. You saw that increase in size, accompanied by divisions of the plasm, had taken place; in other words, motion ending in growth and proliferation had resulted. But all motion results from the action of energy, and so the motion which results in the growth and proliferation of a tissue is, like the more visible motion of a muscle, evidence of the evolution of actual energy.

Every living tissue has irritability; but the results of an irritant differ in different tissues. A gland-cell secretes, a muscle contracts, when irritated, and so on. It would greatly facilitate our progress, as well as widen our conception of living phenomena, if we could hit upon a definition of irritability which would be applicable to any case. I have given no little thought to this important point; and I believe I have arrived at a conclusion which is by no means unimportant. I consider that *a tissue is irritable if, when irritated, it evolve energy.* The form taken by the energy, or the work which it can perform, may differ in different tissues. It may be nerve-motion, the motion which we call contraction, or that which we call growth, and so on. The essence of the whole matter is that the irritant brings about the conversion of potential into actual energy. It causes the potential energy stored up in chemical compounds to undergo conversion into actual energy; in other words, it brings about chemical, and it may be physical, transformations of matter which permit potential energy to become actual. But if we regard irritability as the power of energising on the application of an irritant, what shall we say of a lucifer-match? I show you one. All at rest. The energy in its head is dormant; but I apply the heated wire which caused the nerve and muscle to evolve energy, and see how suddenly its energy starts forth. Now, shall we say that the lucifer-match has, like the nerve and muscle, *irritability*? I decline for the present to return a definite reply to this question. I merely suggest it as one which opens up a most interesting and important line of thought. It is true that some forms of energy produced in living beings differ very decidedly from the forms of energy evolved by inorganic matter. It is true that the chemical compounds which yield the energy in the case of animals are such as do not exist in the inorganic world. It is equally true that the structures which evolve the energy in the living being differ very decidedly from the crude things which do not live. It is also true that living things may evolve energy when acted on by agents which are powerless to cause chemical compounds to evolve energy when they are not in connexion with living tissue. But the energy evolved by our lucifer has a source similar to that evolved by the living tissue. What kind of line, then, shall we draw between the two cases? This we must leave for future research to determine.

In considering the effect of irritants, two factors must be kept in view. One is, the nature and power of the irritant; the other is, the degree of irritability of the tissue. If you pinch the skin gently, the sensation produced is slight; if you pinch it severely pain results. The difference is due to the different degrees of strength of the irritant. On the other hand—the irritant remaining the same,—we can intensify or diminish the result by raising or depressing the irritability of the tissue. For example, I shall freeze the skin of my attendant's hand by means of ether spray obtained from the ingenious instrument invented by my friend Dr. Richardson. [This was here described.] The skin is now quite frozen. I pinch it. He informs us that he feels nothing. Why? Not because the irritant has been affected by the cold, but because the irritability of the frozen nerves has been depressed. The irritant cannot now cause them to evolve nerve energy. When we increase or diminish the strength of the irritant we increase or diminish the amount of energy brought to bear upon the tissue. When we raise or lower the irritability of the tissue we increase or diminish the proneness of the molecules of the tissue to energise.

Before proceeding to consider all the modes in which the irritability of a tissue may be raised or depressed, I request your attention to some considerations regarding the irritant most commonly employed by physiologists to excite the tissues. I mean

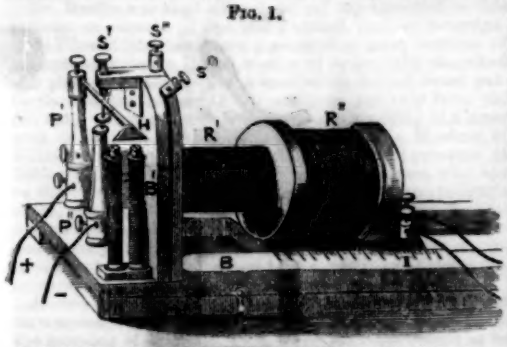
ELECTRICITY.

I presume you are aware that electricity is a dual form of energy. There are two kinds of it, called + and —. These two sorts have remarkable likes and dislikes. + repels +, but it attracts — electricity; and, conversely, — repels —, but attracts + electricity. All bodies seem to be pervaded with these electricities. In those which do not exhibit electrical properties, the + is combined with — electricity. When from any cause the electricities are separated, the body is said to become electrical. The electricities may be separated by *friction*, heat, chemical affinity, contact of heterogeneous substances, &c. [This was illustrated by experiments, which need not here be detailed. I omit also the sketch I gave of the induction and conduction of electricity.]

The two kinds of electricity with which we have most to do are—galvanic or voltaic electricity, and induced or faradic electricity. I have shown you the various batteries used for obtaining galvanism. I now show you the machine (see Figure 1) which we commonly employ in order to get faradic or induced electricity, the kind of electricity most used by us to irritate tissues. In this very convenient induction apparatus, invented by Du Bois Reymond, the secondary coil (B") is made to glide upon a grooved board (B), so that it can be pushed to or from the primary coil (B'). A millimeter scale is attached to the board, and an indicator (I) to the secondary coil, so that its distance from the primary coil may be known. (The scale has been shortened in the figure.) The strength of the instantaneous currents induced in the secondary coil by the closure or opening of the current in the primary coil is inversely as the distance between the two. Hence the induced or faradic currents are strongest when the secondary is pushed up to the primary coil, so as to surround it. This variation of the distance between the coils is the nicest method of graduating the strength of the induced currents obtained from machines of this sort. The board on which the secondary coil glides should be about a yard in length. The wires connected with the electrodes destined to irritate the tissues are attached to the ends of the wire of the secondary coil. The wires from the galvanic battery (a Daniell, Bunsen, or Grove's cell) are attached to the brass

pillars P′ and P″; the negative wire (that from the zinc pole) always to P″. The current passes up the pillar P′, along the thin movable bar of metal, having at its free end

FIG. 1.



Du Bois Reymond's Induction Machine. R′, Primary coil. R″, Secondary coil. B, Board on which secondary coil can be pushed near to or drawn away from primary coil. The wires from the galvanic battery are attached to the pillars (P′ P″), when a succession of induction currents are to be obtained by the vibration of the spring which bears the armature or hammer (H). If single induction shocks are wanted, the wire — is connected with the screw (S‴), and the primary circuit is opened and closed by depressing or raising the hammer (H), so that the bar which bears it may be disconnected or connected with the point of the screw (S′). An induction current is produced when this primary current is opened or closed. When it is desirable to stimulate muscles by means of the primary current (see works on Electro-therapeutics), the battery wires are attached as represented in the figure, but the wires which are to electrify the muscles are removed from the secondary coil and connected with S″ and S‴.

a little soft iron "hammer" H. It passes from this bar to the screw S′; thence to S″, around the coil R′, and then round the coil R′; from thence to the pillar P″. (See Fig. 2.) The two coils at R′ enclose soft iron; this is rendered magnetic by the current; the hammer H is attracted, the bar which bears it is pulled away from the point of the screw S′, and thereby the current is broken; but the soft iron in R′ then loses its magnetism, and the hammer H flies upwards in virtue of the elasticity of the spring which bears it. It comes again into contact with the screw S′, and so closes the current. These changes take place with extreme rapidity, and, seeing that a momentary current is induced in the secondary coil every time the current is closed and opened in the primary coil, the succession of induced currents is extremely rapid. The current induced by opening is a more powerful irritant than that produced by closing the primary circuit. I have described the arrangement such as proposed by Du Bois Reymond first of all, and such as I employ for all ordinary purposes. The successive induced currents given by the machine are, however, of very unequal strength. To overcome this fault, Helmholtz introduced a modification of the apparatus, which I shall now describe to you. (Fig. 2.) A wire is connected with the

FIG. 2.

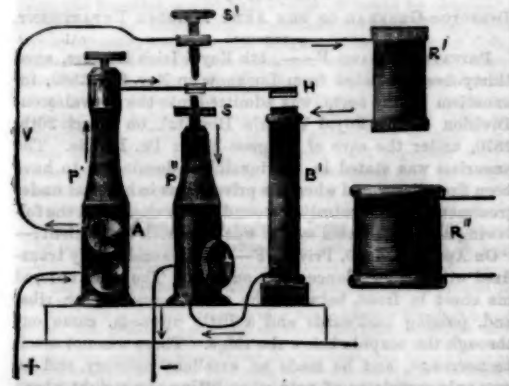


Diagram to illustrate Helmholtz's modification of Du Bois Reymond's machine. The letters are the same as in Fig. 1.

pillar P′ at A. Its other end is connected with the screw S′. This screw is elevated so that it cannot come in contact with the horizontal vibrating bar below it, as in Du Bois Reymond's arrangement; but it is now made to come in contact, during its vibrations, with a screw (S) placed below it. The electricity enters the pillar P′; the whole of it at first passes through the wire V, the primary coil R′, and the electro-magnetic coil R′; but the moment the soft iron in this is rendered magnetic, the hammer H is drawn down, and the bar which bears it is brought into contact with the point above the screw S. This contact completes a much shorter circuit than that round the primary coil, and so by far the larger quantity of the electricity passes up the pillar P′, and down the pillar P″ back to the battery. By the closure of this shorter circuit, the current in the coil R′ is greatly weakened, the soft iron loses most of its magnetism, the hammer springs up, and so on.

The galvanic current is, however, sometimes employed to stimulate tissues, more especially muscle and nerve. The tension or potential of this current is not nearly so great as that of the faradic or induced current. Hence it is not so powerful an irritant. Yet there are instances where the faradic current fails, while the galvanic current succeeds, in irritating muscular tissue more particularly. The galvanic current may be obtained from Smee's, or other batteries; or if a current of feeble strength only is required, it may be readily obtained by wetting with vinegar a pair of Pulvermacher's galvanic forceps.

Various electrodes are employed for applying the electricity to tissues. Those which I most commonly use for stimulating nerves, &c., consist of two copper wires (Fig. 3), fixed in an ebonite handle. The points of the wires

FIG. 3.

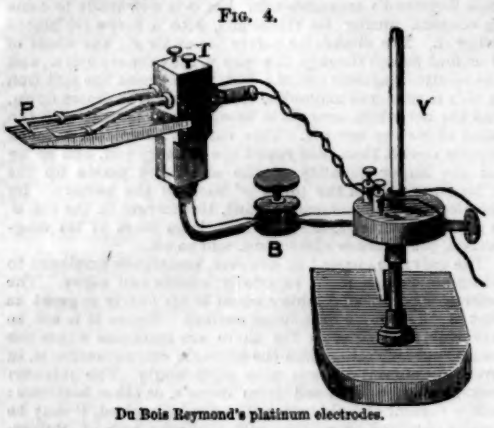
Copper-wire electrodes, in ebonite handle. The ends (V) are applied to tissues. The sockets at the other end of the handle are connected with wires from some source of an electrical current.

(V) project at one end, and on these the nerve is placed. The other ends of the wires are connected with sockets in which the wires which complete the electrical circuit are thrust. These copper wires are, however, polarisable: when acted on by the juices which bathe the tissues they generate feeble electrical currents. The following electrodes (Fig. 4), invented by Du Bois Reymond, are less objectionable in this respect, and useful for many delicate experiments. Two platinum points (P) are connected with brass wires fixed in an ivory block (I). The wires are connected with these. The platinum electrodes lie upon a glass plate. The whole may be rotated in any direction by means of a universal joint (B), and elevated to any height upon a brass pillar (V).

For the most delicate experiments non-polarisable electrodes are essential. These, invented by the same physiologist as the preceding, each consist of a glass tube filled with a saturated solution of zinc sulphate in which is immersed a strip of pure amalgamated zinc (Z, Fig. 5). With this is connected a wire (W) to convey the electricity. The lower end of the tube containing the zinc solution is closed with sculptors' clay moistened with saliva or a dilute solution of common salt. The piece of clay may be made of any shape, according to the purpose for which it is required. When

nerves are to be laid upon it, it may be bent (as represented in Fig. 5). These non-polarisable electrodes are used, not only for conveying electricity to tissues, but also, and indeed most commonly, for conveying electricity *from* tissues, as in researches on the electrical states of the tissues.

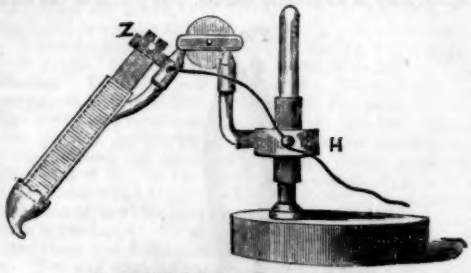
FIG. 4.



Du Bois Reymond's platinum electrodes.

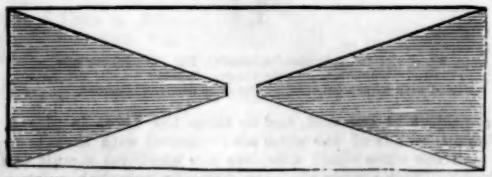
For applying electrical currents to microscopic objects, I employ triangular pieces of *gold-leaf* (Fig. 6) fixed with ordinary gum upon a glass slide. This is a modification of Stricker's microscopic electrodes. The tinfoil recommended by him is too thick. The wires are connected with the gold-leaf by simply flattening the end of each wire, laying it on the leaf, and fixing the one to the other by means of an ordinary American clothes-clip. This arrangement is much simpler and cheaper than Stricker's (see Mr. Power's translation of his "Histology," p. 22). By means of it we have, you remember, had no difficulty in sending induction currents through drops of blood under twenty microscopes at a time.

FIG. 5.



One of Du Bois Reymond's clay electrodes.

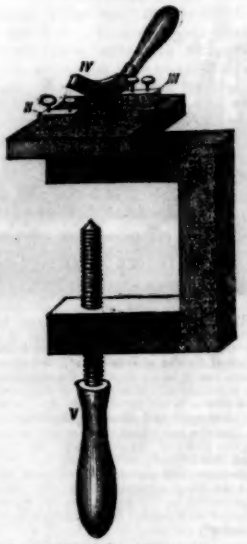
FIG. 6.



Gold-leaf electrodes for stimulating tissues under the microscope. (The glass slide should be 1 in. broad and 6 in. long.)

It is useful to have a convenient arrangement for closing and opening an electrical current. An excellent piece of apparatus for this purpose is the electrical key invented by Du Bois Reymond (Fig. 7). It consists of a plate of vulcanite attached to a framework, which can be fixed on a table by means of a screw (v). On the plate are fixed two brass bars for attaching wires (II and III). These bars may be connected by a movable brass bar (IV), having an ivory handle fixed to it. Commonly one wire is attached to one bar (II), and a second wire to the other (III). When the movable bar (IV) is depressed, the circuit is closed; when it is raised, this is opened. This is the key I always use; but you can make a simpler key if you take a small wide-mouthed bottle, half fill it with mercury, put a cork in it, pierce the cork in two places, put two long needles in the holes, and connect the wires with the upper ends of the needles. Keep the lower end of one needle constantly in the mercury, and push the other one into it when you desire to close the circuit, pull it out when you want to open it.

FIG. 7.



Du Bois Reymond's electrical key.

Note.—Figs. 1, 2, 4, and 5 are slight modifications of figures in Morgan's "Electro-Therapeutics." Fig. 7 is from Rosenthal's "Electricitäts Lehre für Mediciner."

TRANSFIXION OF THE RIGHT SIDE OF THE CHEST AND RIGHT LUNG BY A LANCE, WITH RECOVERY.

REPORTED BY

DEPUTY INSPECTOR-GENERAL T. LONGMORE, C.B.,

PROFESSOR OF MILITARY SURGERY.

Forwarded by the

DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT.

PRIVATE RICHARD F——, 5th Royal Irish Lancers, aged thirty-five, invalided from Lucknow on Nov. 9th, 1869, for aneurism of the aorta, was admitted into the Convalescent Division of the Royal Victoria Hospital, on March 26th, 1870, under the care of Surgeon-Major Dr. Hardie. The aneurism was stated in the invaliding documents to have been first discovered when the private was in hospital under treatment for a penetrating wound of the chest, and the following account of this wound was sent with the patient:—"On April 1st, 1869, Private F—— was accidentally transfixed with his own lance when on duty. The lance entered his chest in front, between the seventh and eighth ribs, and, passing backwards and a little upwards, came out through the scapula below the ridge. There was not much hæmorrhage, and he made an excellent recovery, and he now only complains of pain when lifting any weight above his head." No aneurism was detected at Netley, but dis-

ease of the aortic valves, well marked by the usual symptoms, existed to such an extent as to completely disable the man for military duty.

Dr. Hardie was kind enough to call my attention to this patient on account of the lance wound, and, on investigation, I found that the injury presented so many features of interest as to make it well worthy of being fully described and placed on record. I was enabled to collect exact particulars of the history of the accident, not only from the patient's own description assisted by the handling of a lance such as is used by the 5th Lancers, from the Museum of Military Surgery, but also from the accidental presence at Netley of Hospital-Sergeant Short, 5th Lancers, who was on the spot when the lance was extracted from the patient's chest, and who, indeed, assisted, under the directions of Assistant-Surgeon Dunn,* in effecting its extraction. Examination of the patient's chest at Netley also elicited particulars of interest in respect to the condition of the structures which had been implicated in the original injury.

History of the Accident.—Private F—— was about to start on a message from the orderly room of the 5th Lancers, on the morning of April 1st, 1869, when his horse reared as he was in the act of mounting him. He was lifting his lance across the horse's neck to lower it into the bucket when this occurred, and, being himself thrown forward on his seat, the butt of the lance was also projected in front and touched the ground. No sooner had the horse come down than he again reared; and, in the confusion of the moment, the point of the lance was now brought opposite to the lower part of the right side of the trooper's chest. The horse came down again on his fore feet while the lance was in that position, with its butt end firmly fixed against the ground, and, as the horse descended, the lance was thrust forcibly into the man's chest and the point of it out through his blade-bone. The studs of the lance-flag came out of their openings in the lance iron band as the point of the lance passed through the chest, and the flag fell on the ground.†

The horse next bolted towards the regimental stables, which were distant about a hundred yards from the orderly room, and ran about eighty yards before he could be pulled up; the trooper all the time grasping the lance with his right hand to take the weight off his chest, and pulling up the horse with his bridle or left hand. He appears to have been under the impression that the lance had only gone through beneath the skin of his side until he succeeded in pulling up the horse, when, turning his head round and seeing the part of the lance protruding beyond his right shoulder, seized with sudden panic, he threw himself off his horse, and fell on his left side. The butt of the lance cleared the horse's neck as the man went over; on the butt coming to the ground, however, which it did with great force, the weight of the trooper's body acting on the long weapon by which it was transfixed broke the butt and part of the shaft off. Private F—— did not lose consciousness. He managed to get partly up on his legs, and, assisted by two syces (native grooms) who ran to him, he tried to get the lance out of his body; but the regimental sergeant-major, coming up, stopped them, and made F—— lie quiet till assistance from the hospital, about half a mile off, could be obtained.

Operation of Extraction.—Assistant-Surgeon Dunn, with the apothecary and hospital sergeant, came without delay to the spot where the wounded man was lying. They found him with his coat and shirt taken off, and some horse's litter placed under him. The spear-end of the lance was sticking out behind the shoulder, and was bent from the straight line. The length of this protruding portion was a little over eight inches. The iron butt together with a piece of the shaft between three and four feet in length was broken completely off and lying on the ground; the portion of the shaft protruding from the lower part of the chest in front was about two feet long, and was splintered. The man was quite conscious, and did not appear to have lost any blood from the wound, owing to both openings being firmly plugged by the lance.

Assistant-Surgeon Dunn concluded, from the bent condition of the spear-end, that the shaft must be split or broken between it and the part of the lance protruding in front—in fact, within the chest; and that, therefore, the remains of the lance could not be extracted from below, as otherwise, the shaft being broadest at that part, would have seemed most practicable. The first proceeding, accordingly, was to cut off as much of the shaft as possible near the wound of entrance, so as to lessen the quantity which would have to be drawn up through the chest and lung. This lower portion was sawn off close to the chest.

Attempts were then made to draw out the spear-end and part below through the opening in the scapula, but without success. This confirmed the belief that the weapon was broken below the portion which was visible. The openings in the soft coverings and in the scapula itself were next enlarged, and, on the end being drawn out a little, the broken part came into view. The iron of the spear-plate on the flag side of the lance was found to be broken across just at the upper opening for the insertion of the flag, nearly one foot from the point, together with the adjoining wood. The iron band opposite to this spot was not broken, but was bent at a considerable angle. They had to wait till a proper saw could be got from the armourer-sergeant for sawing through this iron band; but as soon as this was obtained and the division effected, the bent spear-end was removed. There still remained the part within the chest. The movements resulting from the efforts to get away the end of the lance, it was found, had caused the sawn end at the front of the chest to pass inwards a short distance; and, in consequence, what remained of the lance in the chest had to be pushed downwards from the scapular wound, until the end again protruded at the wound of entrance. The end was then laid hold of by the fingers, and on being pulled came away without any difficulty.

A good deal of blood was lost during these operative proceedings, but scarcely any after they were completed. The large opening in front of the chest was temporarily closed by sutures and a bandage, and the man carried in a dhooley to hospital, where he remained about two months under treatment.

Examination of the injured side of the chest at Netley.—The situations of the wounds of entrance and exit of the lance are indicated by strongly marked puckered cicatrices. The front cicatrix is crescentic in form, one inch and a quarter across, and situated over the cartilages of the sixth and seventh ribs. The outer edge of the cicatrix commences one inch to the inner or sternal side of a vertical line drawn from the right nipple. The distance from the nipple to the level of the cicatrix is five inches. The cicatrix behind, over the right scapula, has a general oval outline, and is tightly bound down to the parts beneath. The upper end of the cicatrix is an inch and three-quarters below the spine of the scapula; the lower, two inches from the point of the inferior angle; while the inner border is one inch and a quarter from the vertebral margin of the scapula. An outgrowth of new bone can be felt beneath the cicatrix in the fossa infra-spinata, and this appears to be surrounding a deep depression, perhaps a fissure-like opening, in the bone.

Judging from the relative positions of these cicatrices, the lance probably entered the chest between the cartilages of the fifth and sixth ribs, leaning on the conjoined cartilages of the sixth and seventh ribs as it entered; passed obliquely upwards and backwards through the middle lobe of the lung; and, making its way out between the third and fourth ribs behind, issued through the scapula and integuments at the spot already described.

Scarcely any traces of the injury to which the right lung had been subjected could be found on stethoscopic examination. There was loss of respiratory murmur over a limited space near the wound of entrance, but nothing abnormal could be detected in other parts of the lung. The general expansion of the right side of the chest on inspiration was equal to that of the left side. Some of the movements of the right shoulder were a little restrained, owing to the adhesions about the scapula, but not to such an extent as would have prevented the man's fitness for duty as a lancer; the aortic disease and its consequences were the cause of his being discharged from the service. Although attention was first attracted to this diseased condition when the patient

* Assistant-Surgeon G. C. Dunn, 5th R. I. Lancers, died in India on the 15th of September, 1869.

† The lance of the 5th Lancers is nine feet in length. The shaft is made of ash, and gradually tapers from the butt to the point. Two iron bands proceed from the spear-head down opposite sides of the shaft; one band having two openings for receiving the flag-studs, and being twenty-one inches in length, the other band being eighteen inches long. The heads of the screws by which these bands are fastened to the shaft slightly project. The circumference of the lance at the top opening for the flag is three inches. The weight of the whole weapon is 4¼ lb.

was in hospital on account of injury to his chest, there was no proof that it had not existed before, nor any means of tracing it to be one of the results of the wound, though it was probably aggravated by it and by its attendant circumstances.

Although aware of instances of *penetrating* lance wounds of the lung with recovery having been recorded, I do not remember to have met with any record of a *perforating* lance wound of the chest and lung with recovery; and, thinking that the fragments of the lance by which the injury in the present instance was effected might serve as a permanent illustration of the case, I applied for them to be deposited in the Museum of Military Surgery at Netley, and steps have been taken to obtain them for this purpose.

January, 1871.

ON HOSPITALISM:

BEING A REPLY TO THE SERIES OF PAPERS BY THE LATE SIR J. Y. SIMPSON SO ENTITLED.

BY T. HOLMES,
SURGEON TO ST. GEORGE'S HOSPITAL.

(*Concluded from p. 45.*)

PASSING over some minor matters, and the repetitions of his figures in which Sir J. Simpson so much delighted, I come to the answers which he gives to those of my objections which he considered "relevant." The first and second "objections" he has somewhat misunderstood. My object in noticing that the country figures extend back over twenty years was not, as he thought, from any objection to this or any other period of time which he might find it convenient to select; but if the 2000 amputations are really extended over more than twenty years, as I infer from scattered expressions in Sir J. Simpson's papers, this gives less than 100 a year; and this is only a sample, and, I believe, a small sample, of the number of amputations performed in the country. If any other writer has expressed a different opinion, how can that be used as an argument against me? To leave "my colleague," as he says, "to answer me," is an odd process of logic, and leads to the inference that Sir James himself had no answer to give. But another very important objection does occur to these figures, and this is in some respect connected with the "twenty years." How many of Sir James Simpson's correspondents report from memory, and how many from notes the authenticity and completeness of which can be guaranteed by some rational assurance? If anyone doubts the ambiguity of mere statistics (i. e., bare figures, unaccompanied by any further details), I would refer him to Dr. Matthews Duncan's recently published work on the Mortality of Maternity Hospitals, and ask him to read the excellent chapters headed "Hospital *versus* Home Practice." In fact, these chapters so effectually deprive Sir J. Simpson's argument of any reasonable standing-ground that I should have judged it unnecessary to publish any answer to that part of Sir J. Simpson's papers had not Mr. Lawson Tait's publication in THE LANCET shown that he was either unacquainted with the book or unaffected by its reasoning, conclusive as nevertheless it is.

I may also refer to the same work for the refutation of the extremely weak arguments by which Sir J. Simpson tried to prove that hospitals become less healthy as they grow older. The fact rests on no evidence whatever, the two examples adduced by Sir J. Simpson being self-refuted. In the case of the Edinburgh Infirmary, the authorities of that hospital themselves say that the data of operations at its commencement were not preserved with any care, and that all assertions or conclusions regarding them are undeserving of credit; while, as to the Glasgow Infirmary, Sir J. Simpson's own authority, Lawrie, besides confessing that his statistics were derived from books very carelessly kept, states that in the old times amputation was had recourse to in cases in which its mere proposal would in latter times be scouted, and then goes on with this passage, which ought surely to have induced Sir J. Simpson to pause before he drew so rash a conclusion from Lawrie's figures: "Of the whole number amputated in the early period, 1 in 9 died; in the latter, 1 in 3¾. Cured, including amputations, in the early period, 40, or 1 in 1¼; in the latter, 48, or 1 in 1¾ very nearly. Cured without amputation, in the early period, 13, or 1 in 5·4; latter period, 31, or 1 in 2·6. From which it appears that the *number of cures* in the two periods is nearly precisely the same, but that in the early period it is effected principally by the amputating knife, in the latter by treatment." I cannot comprehend how Sir J. Simpson could found an argument on Lawrie's figures without any reference to such a passage as this. It is, at any rate, a striking instance of the many different causes, besides hospital atmosphere, which may affect the death-rates of amputation; and it will illustrate what I said above as to the difference between success in operating and success in practice.

The only really new matter in Sir J. Simpson's latter series of papers is the evidence which he professes to produce showing that in Germany and elsewhere small temporary hospitals have been more successful than large permanent hospitals. It is entirely inconclusive for that purpose, since it not only avoids all details, but we are not even told that the allowance of patients in the two classes of institutions was the same. Now it is obvious enough that a small hospital must be more successful than a large one, if the former be well managed and not overcrowded, while the latter is encumbered with more than its proper allowance of patients, and in other ways mismanaged. In the Crimea, and elsewhere, the success of hospital tents has been compared with the experience of buildings encumbered with a greater number of sick than their capacity was calculated to receive. Nor is it to be denied that, for military practice, the system of hospital tents offers many advantages, since it enables the hospital accommodation to be proportioned to the varying exigencies of the service, and to the necessary changes of locality. But no proof has yet been given that the tents are more salubrious than the hospitals, provided both are managed under similar and proper regulations. Professor Gurlt's letter, however, as quoted by Sir J. Simpson himself, effectually disposes of the delusion that pyæmia (or septicæmia, as Herr Gurlt prefers to call it,) will be obviated by any such arrangement.

Lastly, we come to the remedy which has been proposed for the enormous evils stated to exist in our present large hospitals. Surely nothing more ludicrous ever received the sanction of a respected name. We are told that our hospital system is so utterly rotten that it causes a mortality in the operations of the best surgeons four times as great as occurs in that of practitioners who only operate rarely, and by accident. By inevitable inference the loss of life in other classes of disease must be proportionate; in fact, the extra mortality of operations is only used as a test and proof of general unhealthiness. This wholesale slaughter has been going on unnoticed under the eyes of the greatest physicians and surgeons of our country for the last hundred years and more. But it might, forsooth, be stopped either by making openings from the wards into the corridors, or by making the entrance into the wards through the window instead of through the door, and blocking up the latter. To this ridiculous proposal it is really sufficient to answer that many of the incriminated institutions have such openings into the corridors already, without any appreciable effect on the death-rate of operations; while as to the proposal of doing away with the staircase (allowing it to be mechanically possible), it seems more likely to spoil the ventilation of the hospital than to improve it. The staircase of a well-constructed hospital acts as a great air-shaft, and much reliance is justly placed on it as a means of ventilation. Let it be granted that by means of it some interchange between the atmosphere of different wards takes place. Considering the great bulk of air in the staircase, and the strong draught that may and ought to exist in other directions, if the windows and skylights be properly disposed and properly kept open, such interchange must be to a very trifling extent. No ill result has ever been proved to follow, nor is it likely that any should. Miss Nightingale, from assuming the fact of such interchange, assuming that it must take place in an upward direction, and assuming that it must be deleterious, was led to the conclusion that the upper wards must be less healthy than the lower ones. It is true that this is contrary to every-day experience; but when was fact allowed to stand in the way of theory? Miss

Nightingale accordingly prescribes that hospitals are to consist of only two flats. Sir J. Simpson is more radical in his ideas, and would have only a single flat. But even in such a construction some interchange of air would probably occur, unless each chamber were absolutely separate; and the inconveniences of such a construction for all purposes of hospital management and supervision are obvious, while its sanitary advantages exist only in theory.

The idea of having hospitals which are to be pulled down from time to time, and reconstructed, is not a feasible one, at any rate in the metropolis; nor do I quite see what its supposed advantages are. In London, and other large cities, such temporary hospitals have often been used (and, I believe, are now in use) for the treatment of outbreaks of epidemic diseases; but the number of beds required in such cases is comparatively few, and the accessories of a permanent hospital and school of medicine are not required. If Sir J. Simpson had been at the trouble of adding up the number of beds in the London hospitals (which is itself, however, at present quite inadequate for the growing wants of the city), and had multiplied this number by the number of square feet required for each bed, and had then taken into consideration that the space thus given must be more than doubled in order to carry out his plan of changing the site of each hospital from time to time without loss of beds, he would have seen how utterly impossible it would be to adopt his suggestion, in this city, at any rate, and I suppose in most other cities, while even in the country districts the waste of ground and material must render it inordinately expensive. What I contend is, that no reason has been shown for any such change of system. I would not be misunderstood (as Sir J. Simpson apparently did misunderstand me) as being an indiscriminate eulogist of our present hospitals; still less as denying the evils which are inherent in the aggregation of the sick in hospitals of any kind. But what I say is, that our present hospitals are the product of the united exertions of many wise men and keen observers, working together with the single object of curing as many of their patients as possible; that the defects which have been proved to exist in them have most of them been remedied, and, as a consequence, a much higher standard of healthiness has been reached than used formerly to prevail; and that by similar means this standard may be still further raised to a degree which we have no right to limit. And I say further, as the result of many years' experience, that the necessary evils of aggregation in city hospitals (large or small) are by no means so great as those inherent in any other of the plans which have been proposed for the treatment of those cases which really require hospital relief. I do not see at all how Sir J. Simpson's plan is directed to meet the evils of the *aggregation* of the sick. He evidently confounded this with the size of a hospital, while the fact really is (as I observed above) that aggregation tends always to increase more in a small city hospital than in a large one. Sir J. Simpson's plan, however, was so crude in itself, and so little supported by any evidence of its necessity, that it does not appear to have met with so much, even, of notice as the great name of its proposer would otherwise have secured. Mr. Lawson Tait now proposes to devote himself to the same inquiry, and I hope he will meet with more success. If any assistance of mine can be of service, he may rely on me; and I am sure that I may say the same for all the authorities of our large hospitals. The improvement of our means for treating the patients under our charge must always be one of the chief objects of hospital physicians and surgeons, and in particular the improvement of that hospital system of which we fully recognise the imperfections, while we are in so many respects (I think justly) proud of it. With the view of assisting in such researches, the medical officers of St. George's Hospital keep records of every case which occurs in the wards, and publish those records year by year in their Hospital Reports. Sir J. Simpson always acknowledged the readiness and completeness with which his applications for information were met at our large schools of medicine. But I must warn Mr. Lawson Tait that figures such as those which Sir Jas. Simpson collected are not worth the pains spent upon compiling them. They are of the nature of those heterogeneous collections of which it has been truly said that figures will prove anything. The reason is because they are susceptible of many different interpretations, while, at the same time, they are not accompanied by any of those facts whereby the true interpretation could be pointed out.* Such figures may do very well as a foundation for a "sensational" newspaper paragraph, but they cannot carry conviction to any person practically acquainted with the matter.

I quite agree with Sir James Simpson in believing that a lamentable waste of life takes place amongst our hospital patients; and that the success of all hospital practice, operative practice included, is not so great as it might be and ought to be. I only differ with him in attributing any large share in that result to the ventilation of the buildings. Its main causes I believe to be, the low vitality of our patients, and the late stage of disease in which we are often consulted. Its cure should, I think, rather be hoped from a better attention to the hygiene of large cities, a more careful attendance on the poor when first attacked by illness, and particularly an improvement in the morals of the population, rather than in a change in the size or arrangements of the hospital wards. In fact, I believe gross exaggeration has prevailed in the influence attributed to these hospital arrangements from the careless style in which inferences have been founded upon death-rate figures, and the equally careless manner in which these very figures have been collected. I hope I have succeeded in showing that Sir J. Simpson's work was deficient both in a firm and credible foundation for his facts, and in the reasoning by which they should have been connected with his conclusions.

Clarges-street, W., Dec. 1870.

A CASE OF

PERFORATING ULCER OF THE STOMACH; RECOVERY.

BY J. ALEXANDER ROSS, M.D.,

HOUSE-PHYSICIAN TO THE NORTH STAFFORDSHIRE INFIRMARY.

THE following case was brought before the notice of the North Staffordshire Medical Society during last session. The notes of the case are given as they were taken in December, 1869.

A hospital servant, aged nineteen, of rather sallow complexion, exhibited for some time symptoms of chronic gastritis. About three years ago, when going down stairs, she leaned on the balusters, poising herself so as to slide down. This produced some pain in her side. Since then she has had pain generally after meals, and particularly after dinner. Occasionally of late food gave great pain, and was immediately vomited; this pain, she said, felt as if "something were scraping her back-bone," and it sometimes shot up between her shoulders. Pyrosis had been a frequent symptom. The bowels, though at times constipated, have been on the whole pretty regular.

These symptoms continued until Thursday, Dec. 31st, when she felt ill from a gnawing pain in the epigastric region, in consequence of which she did not eat any food during the whole day. This subsided towards evening, and she went to bed about 10 P.M., and slept comfortably until 2 A.M., when an excruciating pain, very sudden in its aggression, seized her at the epigastrium, shooting up into both shoulders, but especially into the left. Her screams were piercing.

When I saw her, which was a few minutes after the commencement of this pain, I found her collapsed, the face pale and covered with a clammy sweat, the eyes sunken, the knees drawn up, the breathing short and rapid; she could not speak. At this time she appeared listless, except when a paroxysm of pain came on, and these were very frequent. Though she appeared careless with regard to her critical condition, yet she was afraid to breathe naturally because it increased the pain. There was not any vomiting. I gave her forty minims of the sedative solution of opium, and, this not having given her any ease, she had, after half an hour had elapsed, another dose of thirty minims. Even this produced little or no effect, so, after an hour, she was ordered to have a quarter of a grain of morphia every second hour until morning. Fomentations were applied to the abdomen and a hot-water jar to the feet.

* Contrast, above, Lawrie's explanation of his statistics with Sir James Simpson's interpretation of the same list of figures.

In the morning I found her a little easier, but she had not obtained any sleep. The abdomen was inflated and resonant; the pain remained intense and general; the collapse was present to a great extent; the bowels had not been opened; she was able to pass water; pulse 130, hard and small. Gradually she became worse until the third night, when she appeared to be unconscious of all around.

On being informed that she had not passed any water for thirty-six hours, I determined, though there was no tumour in the hypogastric region, to introduce a catheter, through which only an ounce of high-coloured urine came. The pulse was then 140, and the abdomen considerably distended; in short, there were all the symptoms of severe acute peritonitis, including vomiting of a dark-brown fluid.

Next morning she passed some water; she then felt easier, but there was still considerable prostration. No evacuation of the bowels had taken place since the commencement of the attack.

For the first and second days she took one-sixth of a grain of morphia and a grain of calomel every hour. A light poultice was kept constantly applied to the abdomen, the bedclothes being supported by a cradle. On the third day the pills containing calomel and opium were given every third hour, and on the fourth day they were discontinued, and one-sixth of a grain of morphia given alone every third hour. At no time did the pupils become contracted, and she slept very little. After the fourth day she gradually improved. On the fifth the bowels were evacuated four times, the motions being composed chiefly of blood and mucus. She was able to sit up on the fourteenth day, and soon afterwards went home.

The question naturally suggests itself, What was the cause of this collapse, and this sudden attack of peritonitis? Reviewing the history of the case and the suddenness of the seizure—to which feature Watson and other eminent writers attach much importance,—as well as the other symptoms, I think we must come to the conclusion that it was an instance of chronic gastritis ending in perforating ulcer of the stomach. It may be urged against this view that such cases uniformly have a fatal termination; but well-authenticated cases of recovery are on record. Conspicuous for its conclusiveness amongst these is one the details of which are given in "Guy's Hospital Reports," vol. iv., 2nd series. The patient, a girl, had all the symptoms of perforation, but recovered. Subsequently she died from the same disease, and on examination two open ulcers of the stomach were found, and the cicatrix of the old one, with adhesions between the stomach and adjacent parts and between the coils of intestines.

Dr. Taylor, in his work on Medical Jurisprudence, remarks on the invariably fatal issue of these cases when the contents of the stomach escape into the peritoneal cavity, and the favourable issue sometimes resulting when the contents do not escape, adhesions having previously taken place; he also notices the suddenness of the attack in a person enjoying apparently good health. Now this girl had not eaten anything for at least twelve hours previously; consequently there would be little, if any, fluid to escape when the perforation occurred, supposing that adhesions had not taken place. But when we consider the chronic nature of the case, and the local irritation which had been operating for a length of time in the immediate vicinity of a very sensitive serous membrane, it is but reasonable to suppose that adhesions had taken place to some extent. The remarkable tolerance of opium is well illustrated by the foregoing details.

North Staffordshire Infirmary, Dec. 1870.

COSTLY ECONOMY.—The Home Secretary has, in consequence of the prevalence of fever at Oxford, called the Oxford Local Board to account, and sent Dr. Buchanan to report on the health of the city. The report furnished by that gentleman is so unfavourable that he recommends the local board should at once appoint a medical officer, and that it should, under his guidance, take energetic and instant measures for preventing the further spread of scarlatina in Oxford. This recommendation caused a strong discussion last week, and the board agreed to appoint a temporary officer for a month, at the remuneration of £19! During the discussion it was stated that the board received £9000 last year, and had only expended £1 7s. 6d. for the prevention of disease.—*Times.*

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

THE following operations were performed at this hospital on the 14th inst.

(By Sir WM. FERGUSSON.)

Operation for Cleft Palate.—The patient was a young girl who had originally had hare-lip, and a cleft involving the soft and the hard palate. The hare-lip had been successfully treated in a former operation; the fissure in the soft palate in a second; and a third operation had resulted in the formation of a bridge of union across the centre of the tissues corresponding to the hard palate. On the present occasion Sir William Fergusson was content to deal only with the fissure remaining behind the bridge, reserving the anterior defect for a future operation. The edges were brought together with silk sutures.

Operation for Hare-lip.—In this case the patient had undergone elsewhere an operation which had failed to effect the necessary union at the upper and lower portions of the fissure: the result was that there remained a nostril of abnormal length, and a considerable notch in the lip. Sir Wm. Fergusson drew attention to an obvious redundancy of tissue about the upper lip, which, he said, suggested that the cause of the partial success of the first operation was, that the surgeon had been too sparing of the use of the knife. Observation of cases of his own, on which he had operated years ago, had convinced him that the dread in which surgeons usually stand of cutting too freely, when operating on infants, is not only groundless, but a frequent cause of failure. He removed from the lip a triangular portion, of which the apex came from the posterior boundary of the nostril, and the base of which included the notch in the lip, and measured about half an inch. Having brought the edges of the wound together by means of three hare-lip pins, he painted the whole with collodion.

Operation for Anchylosis of both Hip-joints.—The patient was a delicate boy, in whom articular inflammation of both hip-joints, occurring in the course of an attack of acute rheumatism, had resulted in anchylosis. There was some shortening of the right leg, which Sir William Fergusson attributed to an arrest of development of the articular end of the femur of that side. Exercising some force, he carefully manipulated each thigh back to about a right angle with the pelvis. In the case of the right limb, some strong adhesions had to be overcome, and some roughness was felt; but Sir William did not think that the cartilages were seriously affected on either side. Movement of the limbs was to be repeated from time to time.

Perineal Section.—This operation, and the following one by Mr. Henry Smith, afford good illustrations of how much the use of a grooved staff, as recommended by the late Professor Syme, contributes to the successful completion of the operation on the urethra which has been associated with his name.

The patient's perineum presented a urinous fistula, and bore marks of incisions made for the relief of extravasation. Sir William Fergusson succeeded in introducing the grooved staff through several strictures, but the most careful efforts failed to insinuate it beyond the membranous portion of the urethra. He therefore directed the instrument to be maintained in the position it had attained, and proceeded to make the usual incisions. On the staff being withdrawn, he found it necessary, in order to introduce a bougie, to divide one of the other strictures by an incision at the root of the penis; and then, after the most persevering efforts, and resort to every expedient, it was found impossible to pass any kind of instrument into the membranous

urethra. Having provided a free external opening for the discharge of urine, Sir William said he should not further interfere with the case unless the patient should show symptoms of stricture of that portion of the urethra which had opposed the passage of instruments.

(By Mr. HENRY SMITH.)

Perineal Section.—This patient, also, had a perineal fistula, and showed traces of urinous infiltration about the hinder part of the scrotum. No difficulty was met with in passing a fine grooved staff into the bladder, and, the urethra having been divided, a No. 9 catheter passed readily through the stricture, and emitted a copious stream of urine. Mr. Smith afterwards visited the patient in the ward, and, having tied the catheter in the bladder, ordered him a glass of brandy-and-water.

Operation for Obliteration of a Vascular Tumour of the Forearm.—A vascular tumour of such size as the one in question is of rare occurrence on the upper extremities. It was of spongy consistence, presented no pulsation, and appeared to consist of venous sinuses. Mr. Partridge had operated on the patient two years ago, employing hare-lip pins as for nævus. Seven weeks ago the patient returned with the tumour so increased as to extend from within two inches of the lower extremity of the ulna to two or three inches above the elbow; in this latter situation it expanded into a mass of about the size of a man's fist. Mr. Smith had strangulated the mass at the upper extremity of the tumour with a subcutaneous suture, and passed half-a-dozen pins transversely beneath the remainder. As the patient was a footman, and anxious to return to his employment, a third and supplementary operation was performed on this occasion by the passage of another subcutaneous suture round the upper mass, which had much diminished, and of two more pins beneath what remained of the longitudinal process. Two small tumours of a similar nature, one on the ring finger, and the other on the little finger of the corresponding hand, were also operated on by the passage of a pin above and below the situation of each respectively.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF STRANGULATED ENTERO-EPIPLOCELE; OPERATION; RECOVERY.

(Under the care of Mr. HOLDEN.)

For the notes of this case we are indebted to Mr. Hogg, house-surgeon.

Eliza B—— was admitted with a strangulated femoral hernia on the left side, of six days' duration, with stercoraceous vomiting, which had existed ever since the time at which strangulation took place. She had been ruptured eighteen years, but had never worn a truss. The hernia appeared to have been partially strangulated three times in the last three years, but she had never found it necessary to call in a doctor, as it had always got well again after a few days' rest in bed. She had been taken with stercoraceous vomiting and pain in the rupture six days before admission, and had gone to bed, hoping to get well, as she had done on previous occasions; but she had become gradually worse, the sickness and pain increasing, till, the day before admission, she called in a doctor, who, on the following morning, advised her to come immediately to the hospital.

She was found to be in a state of great collapse, and there was considerable lividity of the skin over the tumour.

The operation was performed an hour after admission. On opening the sac, it was found to contain a large black piece of omentum, and behind this a knuckle of dark-coloured intestine. In consequence of the large size of the piece of omentum, it was found necessary to make a supplemental incision at right angles to, and to the outer side of, the ordinary one. The intestine was returned into the abdomen, and, the piece of omentum being cut off, the stump was left in the wound. The patient was ordered beef-tea and milk diet, a poultice to the wound, and twenty-five drops of solution of opium to be taken nightly.

On the day following the operation the patient vomited; she was ordered two ounces of wine and some ice. The vomiting continued to a small extent on the second day, and four ounces of brandy were substituted for the wine. On the seventh day an injection of olive oil and barley-water was followed by an evacuation. On the tenth day the sickness returned, and brandy, ice, lime-water, and soda-water were ordered; also a pill containing three grains of calomel and one and a half of opium, to be taken at night. On the following day the patient was well enough to be put on fish diet. On the sixteenth day water dressings were substituted for the poultice, and the nightly dose of opium was discontinued. The patient recovered without any further symptoms, except the formation, in the line of the incision, of a small abscess, which discharged itself spontaneously.

METROPOLITAN FREE HOSPITAL.

A CASE OF MALIGNANT DISEASE OF THE OVARIES; DEATH AFTER TAPPING.

(Under the care of Dr. C. DRYSDALE and Mr. SHEFFIELD.)

A WOMAN, aged forty-four, became an out-patient of the hospital at the latter end of November last. She said that in the month of April she had pains and soreness all over the abdomen, but did not remark any swelling until August, when she suffered from great pain in the left groin, and noticed a swelling in the belly at that part, about the size of an egg. This swelling increased rapidly until the whole of the abdomen became enlarged as far as the chest. The menstrual flow, which had always been quite regular except during pregnancy (she had had nine children), had stopped in March, and had not returned. She had been a delicate woman, and fourteen years before had had rheumatic fever. Her father was alive, and her mother had died at the age of sixty-three. She had five brothers and three sisters alive.

When examined by Dr. C. Drysdale she had a pulse of 136, and considerable dyspnœa. He found a globular distension of the abdomen, extending from the ensiform cartilage to the os pubis, and everywhere yielding the sensation of fluctuation, even in the loins, with dulness on percussion throughout, except for about four inches below the ensiform cartilage. The dulness remained in the left and right umbilical regions, even when the patient turned on to either side. On pressure being made on the left iliac region, a hard tumour was easily felt. The uterine sound could not be passed, and the uterus appeared as if in a state of complete retroflexion; it was small, and quite unconnected with the tumour. The urine was scanty, full of urates, and contained no albumen. The patient was very cachectic and emaciated. It was presumed that there existed an ovarian tumour, complicated with ascites. When the patient was admitted it was decided first to tap the abdomen, and to take further steps if necessary.

On December 13th Mr. Sheffield tapped the abdomen about two inches below the umbilicus, and drew off about six quarts of ascitic fluid. As the fluid escaped, the existence of a large tumour, chiefly located in the left iliac region, became manifest to the eye. It extended over to the right iliac region. The patient was in such a low state that the idea of operating was at once abandoned, especially as it was suggested that the tumour might be of a malignant nature. The patient gradually became more emaciated, and died on December 22nd, with symptoms of peritonitis.

After death both ovaries were found to be the seat of a scirrhous tumour; that of the left side being of the size of the head of an adult, and that of the right of the size of a child's head. Cancer cells were well seen in the juice of the tumours. The uterus appeared to be healthy.

THE CAUSE OF SEA-SICKNESS. — Dr. Neudörfer states, in the *Allg. Mil. Zeit.* No. 50, 1870, that sea-sickness is greatly due to the reception of salt water into the lungs. The aqueous portion is excreted, but the saline particles remain in the lungs, and hinder the interchange of gases. When the saline deposits have reached a certain amount, they act as a toxic agent, and generate sea-sickness. Hence the necessity of allowing the passage of water, but stopping the admission of saline particles. This reminds one of Professor Tyndall's proposals of arresting dust with cotton wool, and excluding the cold air.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 10TH, 1871.

DR. BURROWS, F.R.S., PRESIDENT, IN THE CHAIR.

ON THE DURATION OF PHTHISIS PULMONALIS, AND ON CERTAIN CONDITIONS WHICH INFLUENCE IT.

BY C. THEODORE WILLIAMS, M.D. OXON.,

ASSISTANT-PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

THE author commences by stating that he uses the term "phthisis" in a broad sense, to signify consuming pulmonary disease, attended by a well-known group of symptoms; and includes under it, besides tubercle, all states of the lung which tend to excavation and caseation.

The object of the present paper is to give some account of a thousand cases of phthisis selected from the private practice of Dr. Williams and the author, and to deduce the amount of influence which the conditions of age, sex, family, predisposition, and origin exercised on the duration of the malady. The patients belonged chiefly to the upper and middle classes. The cases have been taken from the records of those who first consulted Dr. Williams between 1842 and 1864, a period of twenty-two years; the ground of selection being that each case has been at least one year under observation.

Sex.—The author, after explaining how the cases were recorded and exhibiting certain tables, states that 625 of the 1000 were males and 375 females.

Age.—Taking the sexes collectively, 41 per cent. were attacked between twenty and thirty, 25 per cent. between thirty and forty, 19¼ per cent. under twenty, and 13¾ above forty. Considerable difference was found to exist between the two sexes as to the time of attack. Between twenty and thirty, the most common period of attack for both sexes, about 7 per cent. more females were attacked than males; and, again, between ten and twenty, 11¾ per cent. more. On the other hand, after thirty, the reverse was the case. Between thirty and forty, the males exceeded the females by 11¼ per cent.; and above forty, by 6 per cent. The average age when attacked was, for the males, twenty-nine years and a half; for the females, twenty-six years.

Family predisposition.—This term is substituted for "hereditary predisposition," in order to include brothers and sisters and first cousins in addition to those of the preceding generation; the principle being to include as instances of disease in a family all near relations derivable from a common stock. Family predisposition was traced in 48 per cent. of the patients: in 43 per cent. of the males, and 57 per cent. of the females. In the particulars which are given it is noted that nearly half of the cases had only brothers and sisters affected.

Origin and first symptoms.—In 315 cases, phthisis originated in, or followed closely after, the following diseases—viz., pleurisy and pleuro-pneumonia (143), bronchitis (118), asthma, scrofulous abscesses, fistula, whooping-cough, croup, scarlatina, measles, continued fevers, peritonitis, malformations of the chest, and injuries: 26¼ per cent. of the whole number of cases were traced to inflammatory attacks (pleurisy, pleuro-pneumonia, and bronchitis); and of these patients, 14·2 per cent. were free from any suspicion of family predisposition. The origin of phthisis from inflammatory attacks is then dwelt on, and the symptoms indicating the conversion of pleuro-pneumonia and of bronchitis into phthisis sketched, and the more general recognition by medical men of their common occurrence among both upper and lower classes is strongly urged.

Hæmoptysis was present in 57 per cent. of the patients.

State of lungs.—In describing the condition of the lungs, Dr. Williams explains why he adopts the classification of *stages*, and what extent of disease each stage is intended to include. In none of the cases is the evidence of physical signs alone accepted; in all it is amply confirmed by clinical symptoms. Two-thirds of the patients were in the first stage at first visit, 18 per cent. in the second, and 14¼ per cent. in the third; 14 cases presenting the signs of other diseases on which those of consumption shortly supervened. One hundred and ninety-eight patients are ascertained to have died; the mortality of those who came in the third stage being about double that of those who came in the first. The average duration of life among the 198 who died was seven years and eight months and three quarters; 21 of whom lived from fifteen to twenty-eight years after first attack. Among the 802 living patients, the average is at present eight years and two months and a quarter: 246 have lived more than ten years, 65 more than twenty, 2 more than thirty, and 1 more than forty years.

An account of the present state of these patients is then given, and it is shown that 72 per cent. have regained their health sufficiently to follow their occupations; 28 per cent. are still invalids.

Dr. Williams then discusses the views of Louis, Bayle, Laennec, Andral, Fuller, Pollock, and other authorities as to the duration of phthisis, and attributes the long duration of the present cases to—(1) the early detection of the disease; (2) the perseverance with which the patients carried out the various healing measures recommended to them, whether medicinal, hygienic, or climatic. The influences of age and sex on duration are next considered; and on these points the author's statistics show that—(1) the later the time of attack the longer was the duration, this being more marked among the males than among the females; (2) that females are, on an average, attacked four years earlier than males; and (3) that among them the duration of the disease is one year and a half shorter, and the average age reached is five years and a half less than among males.

The conclusions as to the effect of family predisposition on duration are (1) that it does not directly limit the duration of the disease; (2) that it precipitates the onset of the disease, thus shortening the duration of life; (3) that it affects females more than males.

The influence of the inflammatory origin on the duration of phthisis is next considered, and the author concludes that cases arising from pleurisy or pleuro-pneumonia enjoy a longer duration than the average, such extension amounting to at least a year and a half or two years.

DR. POWELL thought it was well to have chosen the widest meaning for the word phthisis, as it would have been difficult to separate into groups. Nevertheless, it would have been well to separate a certain number; thus, it would be well to know the proportion of pneumonic phthisis. He thought recoveries were often of this class. The knowledge that people might live so long with cheesy matter in their lungs, and with no accession of miliary tubercle, was valuable. It contradicted the views of Waldenburg and others, and showed there must be something more than a caseous mass—specificity, heredity, or something. Family predisposition was traced in nearly one-half of the cases recorded, but in many instances those affected were brothers or sisters, which would rather show common exposure as influences.

DR. MARCET thought it difficult to say if bronchitis passed into phthisis; the physical signs were much alike, especially in capillary bronchitis. The numbers of those who got well were remarkable; perhaps it was due to the elimination of acute cases. He thought if their digestion was kept up, patients generally did well.

DR. C. J. B. WILLIAMS said: As almost all the cases which have been the subjects of analysis in this paper occurred in my practice, and were observed and noted by myself, I may be expected to give any required explanation of the facts for which I am answerable. But even before the Society, I must express my obligation to my son for the immense trouble which he has taken in arranging and analysing the particulars of the cases, and obtaining the exact results of numerical calculation. As they existed in my note-books, they formed an enormous mass—almost overwhelming by its quantity. All this experience had, indeed, led me to general inferences, which are correct; but through the tabulations and calculations which my son has made, I have gained ideas more precise, and of greater extent, than those which I had before from my own impressions. For example, with regard to the duration of life in phthisis, I knew that the average of my cases far exceeded the term of two years, assigned as the usual average by Laennec and Louis; and, on general impression, I had fixed it at five years. But, by actual counting, it is found to reach to nearly eight years in the 198 cases that have ended in death, and to

above eight years in the 802 still living, and with prospect of further increase. The influence of age and sex on the duration of life is also in conformity with previous impressions—the disease being more rapid in the young and in females, and slower in those older and in males. The effects of family tendency came out by calculation somewhat differently from what was expected. It accelerates the onset of the attack, but does not shorten its duration; it seems, therefore, to render the body more prone to the disease, but not to render the disease more intense. The term "family" predisposition has been preferred to hereditary, in order to include the very common case of several brothers or sisters in succession being affected, even where the disease has not occurred in either parent or progenitor. Dr. Powell has suggested (as did also the author, in the paper) that this might arise from members of the same family being exposed to similar external causes; but I have known several instances in which, after one or two of a family have died, the others have been purposely removed from home, and all circumstances changed, and yet the disease has shown itself, proving that the cause is constitutional and intrinsic. Some similar influence is required, also, to make acute inflammation terminate in phthisis. The tables show that 26½ per cent. of the cases originated in inflammation; and this is quite in accordance with my general experience. It has now become the fashion to recognise inflammation as a common cause of consumption, and this, forsooth, because this notion has been strongly advocated by some German physicians; but I do not see why we are to be led by the Germans in this matter. For the last forty years I have consistently argued for the inflammatory origin of many forms of phthisis. I first derived this notion from my eminent and revered teacher, Professor Alison, of Edinburgh; and it so happened that some of the cases which he published in corroboration of his views were my patients, under his supervision, at the New Town Dispensary. But this was, also, the common opinion before the time of Laennec, and was maintained by Broussais, Andral, and Cruveilhier, in opposition to Laennec. But inflammation alone does not suffice to produce phthisical disease of the lung. Acute inflammation may attack the lung in any intensity, and yet pass away without leaving any trace or tendency to consumption. It is where it is rendered persistent or chronic by repeated attacks or neglect, or where there is a state of constitution called scrofulous, or deteriorated by unhealthy influences which degrade nutrition, that the products of inflammation tend to caseation and excavation, and end in consumption. What this consumptive or tuberculous constitution is, there is not time, nor is there the occasion, to discuss; and I would only say that I believe it to be intimately connected with the lymphatic system and the abundant production of leucocytes or pale corpuscles—those wonderful agents and representatives of the plastic process. Dr. Marcet remarked that it would be difficult to distinguish when bronchitis passes into phthisis; but I have found distinctive signs in the supervention of patches of dulness on percussion, together with tubular sounds and coarser crepitus, generally near the summit or root of the lung; and there are, also, persistently increased temperature and emaciation. The forms of bronchitis most apt to pass into phthisis are those attended with plastic or purulent expectoration, indicating a deep-seated inflammation. I must not omit to notice the ground of selection of these cases—that they had been under my observation for at least one year, and that, although such selection obviously supplies more reliable and satisfactory results with regard to the history of the disease and its treatment, it excludes the more acute cases which terminated fatally within that period. The proportion of such cases is, however, very small, not amounting to 5 per cent. The selected cases, therefore, represent chronic phthisis, and those of the acute disease which have been arrested and rendered chronic by treatment. In conclusion, I would express my conviction, derived from a very large experience, that much may be done to save and prolong life in consumptive disease, mainly by subduing and warding off inflammation and irritation, and by sustaining the vital powers by every kind of means, medical and hygienic; but, to be successful, this treatment must be unremittingly persevered in, not for weeks or months only, but for years, and sometimes even for the whole lifetime.

Dr. ANDREW CLARK referred to the gratifying spectacle of father and son at work on the same problems. Their work was a real and valuable contribution to the history of phthisis, but only of chronic phthisical disease. Even then there was one defect—there was no reference to the habits of the patient. From a scientific point of view there were different kinds of phthisis, but this division had not been recognised or followed. He thought phthisis arising from pleuritic disease prolonged, not so if it arose from inflammatory deposits, especially if pneumonic.

Dr. THEODORE WILLIAMS, in reply, thanked the Fellows of the Society for the kind reception they had given to his paper and the accompanying tables, which, from their statistical nature, he was afraid would have proved wearisome. He would suggest that, if the paper were honoured with a place in the Transactions, it might be rendered more lucid by extracts from the tables, which were in themselves too lengthy for publication. In reply to Dr. Powell as to the number of cases of tuberculosis included in the thousand cases, he stated that it was very difficult, and often impossible, to determine when tuberculosis supervened in a case of caseous phthisis. He differed from Dr. Marcet as to the difficulty of diagnosing when a case of bronchitis had become one of phthisis, but agreed with him that, in consumptive cases, improvement in general health, as a rule, far preceded improvement in physical signs. With reference to the varieties of phthisis adverted to by Dr. Andrew Clark, Dr. Theodore Williams explained that he was opposed to drawing a hard-and-fast line between them, as he considered that they merged imperceptibly into one another, and he had preferred, until more facts had been accumulated, to class the cases according to their origin, whether local, as from bronchitis, or pleuro-pneumonic or constitutional, as in ordinary phthisis. In expressing his gratification at the able criticisms of Dr. Clark, and his appreciation of the amount of labour involved in the paper, the author said it was only due to Dr. C. J. B. Williams to state that the cases were most carefully kept, and that the work of arranging for statistics had thus been rendered comparatively easy. Dr. Theodore Williams hoped to continue his researches, and in time to elucidate other points of interest with reference to the duration of phthisis.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 4TH, 1871.

DR. GRAILY HEWITT, PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society:—Fletcher Beach, M.R.C.S.; George Eastes, M.B., F.R.C.S.; G. D. M'Cullam, M.D., Montreal; Edward Malins, M.D., Cradley Heath; David Mathias, M.R.C.S., Cardigan; G. H. Pedler, M.R.C.S.; James Perrigo, M.D., Montreal; Arthur Roberts, M.R.C.S., Kensington; John Tanner, M.D.

Dr. CLEVELAND exhibited a Fœtus, about the fifth month, with the cord curiously knotted round the neck, which had apparently caused its death.

Dr. PLAYFAIR exhibited a Pessary, the invention of a patient, which ingeniously combined the advantages of the stem and Zwanche's pessary, with a contrivance for easily opening the leaves.

Dr. C. KIDD read a paper "On Chloral Hydrate and Chloroform in general Obstetric Practice, especially in Labour cases."

Dr. PHILLIPS had no experience of chloral in natural cases; but during the past nine months had used it extensively in the puerperal state, especially in five cases of puerperal mania, and two of puerperal convulsions. In four of the five cases of mania its action had been very beneficial, while in the fifth it failed to produce sleep, though given in full doses. In one case of mania the patient had no sleep for three days, though opium had been given, but within five minutes of taking half a drachm of hydrate of chloral she fell asleep for four hours, and again for five hours more. In another case, on the fourth day it was given in full doses, and the next day the patient was quite rational. The chloral hydrate was very suitable for the restless, sleepless condition not uncommon after delivery. A drachm dose produced no effect in one case of convulsions, while in another, in which the paroxysms were severe and

frequently repeated, the action of the chloral was very marked. It was very satisfactory to hear such a favourable account of chloroform in obstetric practice from one so accustomed to its use as Dr. Kidd was. Dr. Phillips had seen it used in abnormal labours without untoward effects, and this notwithstanding that he had had it used continuously for twelve consecutive hours in puerperal convulsions.

Dr. WILTSHIRE asked for information about the change of chloral into chloroform in the blood. He believed that statement had been called in question.

Dr. HEYWOOD SMITH also took a favourable view of the action of chloral in puerperal affections. He narrated a case of puerperal peritonitis with vomiting, in which he had given sixty grains, repeated in three hours, with the best effect.

Dr. PLAYFAIR said he had found chloral of the greatest value, but thought that it was somewhat unsafe to give it in such large doses as sixty grains, repeated in three hours. He mentioned a case of puerperal convulsions in which it had acted admirably, but in which the patient eventually sank, and said he was unable to divest himself of the fear that the chloral, which had been given freely, might have had something to do with it.

Dr. KIDD said that Liebreich's theory was now pretty generally received. In labour cases the chloral seemed to be specially useful in the first stage, relieving restlessness, &c., without stopping uterine action. Dr. Kidd insisted on a simple apparatus for giving chloroform, objecting to balloons, tubes, &c., as likely to frighten the patient.

The PRESIDENT then delivered the annual address, which we published *in extenso* last week.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JAN. 13TH, 1871.

MR. PAGET, PRESIDENT, IN THE CHAIR.

THIS was the annual meeting, and the proceedings commenced with the reading, by Mr. Callender, hon. secretary, of a Report from the Council, by which it appeared that the Society was in every respect—as regards numbers, character of papers, and finance—in a most flourishing condition. The balance was £206. The following resolutions were agreed to:—It was proposed by Dr. Powell and seconded by Dr. Silver, that the reports presented by the Council be adopted. Dr. Barclay proposed and Dr. Cruckenell seconded a cordial vote of thanks to the retiring president, Mr. Paget, for his services during the past session. A vote of thanks, proposed by Dr. Cholmeley and seconded by Dr. Cayley, was accorded to Mr. Callender and the other retiring members of the Council for their services to the Society. The following is the list of officers and council for the ensuing year:—President: Dr. Gull. Vice-Presidents: Dr. Chambers, Dr. Peacock, Dr. Owen Rees, Dr. Burdon Sanderson, Mr. Erichsen, Mr. Prescott Hewett, Mr. Henry Lee, Mr. Campbell De Morgan. Treasurer: Dr. Headlam Greenhow. Council: Drs. Barclay, Broadbent, Cholmeley, Langdon Down, Handfield Jones, Meadows, Pavy, Sydney Ringer, Hermann Weber, Wilks, Messrs. Callender, John Croft, Gascoyen, Christopher Heath, Berkeley Hill, Holthouse, Kesteven, Chas. F. Maunder, Septimus Sibley, and Thomas Smith. Hon. Secretaries: Dr. Buzzard, and Mr. George Lawson.

Dr. PAVY read notes of a case of Paroxysmal Hæmatinuria, and exhibited specimens of the urine. The patient, previously in good health, was seized, after exposure to cold, with nausea, and passed urine porter-like in colour. He was sent to bed, and the urine gradually became natural. Eleven days after he was again exposed to cold, and a relapse occurred. The urine in these paroxysms contained coloured granules and oxalate-of-lime crystals, but no blood-corpuscles and no casts of tubes. Dr. Pavy spoke of the affection as one characterised by well-defined symptoms quite distinct from ordinary hæmaturia, and said that the attacks always followed exposure to cold. He had a characteristic case just then under his care in Guy's Hospital (Philip ward, No. 43), who could be visited by members interested in the subject.

Dr. BROADBENT described a case of the kind. He had not found oxalates, and did not attach importance to their presence.

Mr. GANT related an instance which illustrated the effect of emotional causes in sometimes giving rise to these symptoms.

Mr. T. SMITH spoke of a patient who gets hæmatinuria after eating rhubarb-tart, and in whom it would seem to arise from the passage of oxalate-of-lime crystals through the kidneys.

Dr. GREENHOW remarked that cases are often entitled paroxysmal hæmatinuria which have no right to that appellation. He had always found oxaluria in cases of this disease. It should be noted that it is the colouring matter of blood, and not corpuscles, which is met with in true cases, and that the albumen is usually soluble in an excess of nitric acid.

Dr. DOWN referred to an instance of intermittent albuminuria characterised by rigors, and followed by the presence of albumen and oxalate of lime in the urine, but no renal casts.

Dr. WILTSHIRE thought the disease was allied to one affecting cattle much exposed to cold in pastures, and called "red water." He added some personal explanations in reference to a paper read by him at the Society a short time since.

Dr. PAVY, in replying, did not think that Mr. Smith's case could be properly considered one of paroxysmal hæmatinuria. He had usually, but not always, found oxalate-of-lime crystals.

The discussion upon Mr. T. Smith's case of ulcer following vaccination, which had been adjourned from the previous meeting, was opened by Mr. CARTER, who, in a speech of some length, maintained the probable communicability of syphilis by vaccination. In illustration, he referred to instances of one child alone, in a family of healthy children, developing syphilitic symptoms some years after vaccination. Syphilis handed down from the parent does not wear itself out with one child, leaving the others altogether unscathed. This was a better test than the personal representations of the parents, which were of course subject to fallacy. He believed that lymph, just as well as blood, would convey the poison. The blood of variola did not communicate the disease; the poison seemed to be elaborated in the vesicle.

Dr. CHOLMELEY opposed Mr. Carter's view, and could not conceive the possibility of syphilis, introduced by vaccination, giving no evidence of its presence, but years afterwards betraying itself.

Mr. TEEVAN referred to a German experiment, in which the injection of blood from a syphilitic patient into a woman was followed by secondary symptoms, without a secondary sore. He believed, with Mr. Carter, that the disease could be conveyed without a sore being produced.

Mr. BERKELEY HILL referred to cases of children who had acquired syphilis, and in whom the jagged teeth and ulceration about the face had not been found as in the inherited disease. He did not think that all the children, when syphilis was inherited, need suffer.

Mr. KESTEVEN and Mr. GASCOYEN also objected to the arguments of the first speaker.

Mr. T. SMITH reminded the members that the poison in the seminal fluid lay dormant for at least ten months, as syphilis rarely appeared for a fortnight after birth.

Mr. PAGET said it must be yet open to doubt whether grandparents could not transmit syphilis, leaving the parents unaffected.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The annual meeting of the Committee of Management was held on the 7th inst., when the report for the year 1870 was read, showing that the number of in-patients received during the year was 1273, and of out-patients 228. The number of patients during the last six years has been nearly double the number received during the first six years of the hospital's existence. The average cost of in-patients per head per day was last year 1*s.* 7*d.*, and it is explained, for the benefit of those who may think this a high rate, that it is owing to an unrestricted allowance of animal food of the best quality at dinner every day, the average consumption of meat per head per day being nearly three-quarters of a pound. The year's receipts appear to have been of a very satisfactory character, and this, no doubt, will encourage the committee to carry out a projected extension of the hospital. The services of the medical staff are gratefully acknowledged by the committee.

REPORT
OF
The Lancet Sanitary Commission
ON
PUBLIC VACCINATION IN THE METROPOLIS.

ISLINGTON.

SMALL-POX has been and is still extremely prevalent in Islington. During the last two months 156 cases have been treated by the district medical officers and at the medical charities. Many cases have been sent to the Small-pox Hospital, and 19 cases are at present under treatment by the parish officers. It was reported last week to the guardians that six patients were waiting for admission to the Small-pox Hospital; and thereupon it was resolved to furnish some of the wards in the old workhouse in Liverpool-road. There have been many cases under the care of private practitioners in all parts of the district.

The parish of Islington comprises an area of 3127 acres, and an estimated population of more than 200,000. The number of births in 1869 was 7483; and taking the average of St. Luke's, Middlesex, which is reported to be one of the best examples of public vaccination, 50 per cent., or 3740 infants, should be vaccinated at the public stations in Islington. The parish is about five miles long by two broad. It was formerly divided into eight vaccination districts, but this number has been reduced one-half. Notwithstanding repeated remonstrances on the part of the inspector of the Privy Council, no inspecting officer was appointed by the guardians until February, 1870; and considerable objections were made to the position of some of the stations, particularly to the one in Liverpool-road connected with the workhouse.

We visited the station at St. Peter's School on Saturday, the 7th inst. We met with Dr. Seaton and Dr. Harston, the latter of whom was attending for the first time as public vaccinator, his predecessor, Dr. Turner, having lately resigned. Dr. Turner states that he did not find the post sufficiently remunerative. He said that Saturday afternoon was an extremely inconvenient time for the attendance of wives of clerks and working men, who on that day come home from work early, bringing their wages with them. It is on Saturday afternoon that the wife has to go to market, and clean up the home for Sunday. So that he had found a great falling off in the attendance as compared with his previous experience as a parish vaccinator at his own house. Of late the number of children brought had not been more than four or five per week; and the mothers so often neglected to bring the children up for inspection that it considerably diminished the number of his fees. There was undoubtedly some increase when the inspector first made visits in the district; but it was nearly six months before he got there, having begun at the opposite end of the parish. At this station there were no vaccinated children, and no supply of lymph. Eight women with children had to be dismissed until the following week, when Dr. Harston succeeded in inducing a woman to bring her child with fine vesicles from another station. No revaccinations have occurred at this station.

The Ball's-pond station is at the Parochial Dispensary. The arrangements are much more comfortable, both for the women and children and the vaccinator. The time is Tuesday, at 2 o'clock. Three children attended out of four vaccinated the previous week; the vesicles were small and unsatisfactory. Possibly the frost was partly to blame for this. Only one child had four vesicles. One was decidedly unfit for taking lymph from. There were four children brought for vaccination; one was postponed on account of eczematous eruptions on the face. The habit of the vaccinator is to make four punctures with a lancet, all on one arm. It would seem to be exceptional that all of these take. Mr. Donald, the vaccinator at this station, has been many years a public vaccinator, but he lives more than a mile from the Ball's-pond station, and is not personally known to the inhabitants of this district. But in his own locality he has numerous applications for vaccination, and at present he does as many children at his own house as at the public station. He does very few revaccinations, and has not had any instructions as to extra exertions, &c., to meet the present emergency.

The third station is at Holloway. It is a small and rather dark room at the schools; the time 3 o'clock on Fridays. This station is not conveniently placed. It serves a very large area. Two women had brought their children a full mile and a half. One had eight children, and had left several at home, without any satisfactory supervision. Dr. Cotton has been a public vaccinator seven years. The area and population of his district were formerly less than half those which he now takes charge of. At that time his station was nearly central in the smaller district, at his own surgery. He never experienced any difficulty in keeping up arm-to-arm vaccination. The change has now been made nearly two years; and although his district is so much larger, comprising nearly 50,000 inhabitants, he vaccinates very few more children now than he did formerly. The effect of the diminution in the number of vaccinators has been to throw vaccination more generally into the hands of private practitioners. We found four vaccinated children to have returned for inspection out of five vaccinated the week before. The vesicles were large and fine. Dr. Cotton first puts upon the surface a large quantity of liquid lymph, and then makes a series of small punctures and scratches on the surface with the point of his lancet. He makes four insertions, and all generally take successfully. Four children were vaccinated. All the children had a more healthy appearance than those at the previous stations. Practitioners frequently send to Dr. Cotton's station for lymph. One bottle was charged at the time of our inspection. There have been no revaccinations of late. Formerly Dr. Cotton used to attend and revaccinate all persons residing in houses in which small-pox occurred; but as he is unable to charge for this service under present regulations he has discontinued it. He has not received instructions to depart from the usual practice during the present epidemic.

The fourth station is at St. Thomas's Schools, Everilda-street, Hemingford-road, not far from the Caledonian-road. This station was found with considerable difficulty. It is situated in a bye-street, and there is no notice board outside. It was stated that the clergyman objected to have a notice board put up; but we suppose he does not object to the fee of £10 paid by the guardians for the use of the sort of underground cellar on Saturday afternoons when there are no pupils. At this station there was a failure of arm-to-arm vaccination the week previous. Six children were vaccinated from preserved lymph, of whom five were brought up for inspection. Dr. Wilkinson vaccinates by a peculiar mode of inserting the point of the lancet. He makes four insertions. In half the number seen there were four vesicles; in one, two only. Except in one instance the vesicles were small, and more or less retarded by the cold weather. Nine children were vaccinated. Dr. Wilkinson loses two or three pounds each half-year in consequence of the neglect of the mothers to return for inspection. Two of the children vaccinated were over four years of age. Both were said to have been done previously without result. One only had received a visit from the inspector and had come up for vaccination in consequence. At this station there has been a complete break-down as the result of a change of vaccinators last year and the more recent removal of the station from the workhouse. Dr. Wilkinson is of opinion that there was a great objection on the part of many persons to attend for vaccination at the workhouse. The present station is as yet very imperfectly known, and is likely to remain so. There was a

temporary increase when the inspector was working in the district last November, but this increase has greatly fallen off during the last two months. To-day is the first time since then that a child has been brought up in consequence of his visit. Dr. Wilkinson has done no revaccination at the station. During last half-year he charged for 25 revaccinations, done either at his own residence or at the houses in which there was small-pox. He was unaware that he was infringing the regulations of the Privy Council, and said that he should at once write to the guardians on the subject.

It would thus appear, as the result of our visits to Islington, that only 16 children were actually vaccinated last week at the public stations; and according to the testimony of the public vaccinators it appears to be doubtful if the average is so high as ten per week at each station, or say 1200 cases amongst them in the year. The payments made by the guardians for the last perfect half-year, when there were eight public vaccinators, amounted to £74 3s.; or, in round numbers, the vaccinators did 2000 children in the year. During the corresponding half-year, after the complete introduction of the new arrangements, the payments amounted to £43 12s., or less than 1200 cases in the year. It is extremely probable that the numbers will to some extent increase; but, in spite of every possible allowance, it is certain that the reduction in the number of vaccinators has resulted in a great reduction in the number of children vaccinated at the public stations, and thrown more vaccination into the hands of practitioners who are not amenable to the visits and authority of the Inspector of Vaccination.

We have found at least four private practitioners in Islington who practise gratuitous vaccinations from arm to arm. The number of children vaccinated by each varies from 150 to 400 in the year. One practitioner makes six insertions, two four, one three, and one two. The last two use a peculiar instrument, which has the effect of making vesicles as large as a sixpence. These gentlemen state that they never fail, and, what is very remarkable, their patients rarely, if ever, fail to return for inspection on the proper day, and never without making a reasonable excuse. All these gentlemen are advocates of revaccination. Some of them keep very large supplies of liquid lymph in tubes, and supply it freely to medical practitioners in the neighbourhood. Dr. Brunton states his opinion to be, that with proper care there ought at all times to be an abundant supply for purposes of revaccination. He revaccinates every person in those houses in which small-pox occurs. Dr. Lamb vaccinates in four places; but, unless more than two take satisfactorily, he revaccinates immediately, that being regarded as the only certain test of safety. Nearly the whole of this work is done gratuitously. Dr. Brunton is of opinion that every medical practitioner who vaccinates 100 children in the year from arm to arm, and who is willing to submit to the regulations and inspection of the Privy Council, should be made a public vaccinator. He believes that general vaccination can be best promoted by securing the personal interest of medical practitioners, and that, with management, it is quite possible to keep up direct arm-to-arm vaccination with 150 cases in the year. The other private practitioners concur in this view. All are in the habit of occasionally postponing vaccination for a week, in order to keep up a continuous succession. Dr. Brunton, of the Caledonian-road, is of opinion that patients sent to the Small-pox Hospital are not detained until the danger of communicating the disease has passed. He is the medical officer to the Great Northern Railway, and not long ago he sent a porter to the hospital. He was only detained ten days, and desquamation was not completed at the time of his discharge. It was three weeks before this man was fit to resume work at the station. This is an important point. We found from inquiries at the hospital that the duration of unmitigated cases was generally twenty-eight days, and that many are detained much longer; whilst patients labouring under the modified form are often discharged at the end of a week. It is fair to add that inquiries into a number of special cases failed to prove that fresh cases had occurred in the houses to which the patients had returned.

The Inspector of Vaccination commenced his duties in February last. It was found that there were, up to that date, 5317 defaulters, who had failed to send in certificates to the registrars. The inspector began his visitation at one end of the parish, and it was nearly four months before he reached the last district. He has delivered 2687 notices requiring vaccination to be done. He found 417 children dead; 446 whose parents had removed to other parishes; and he has sent notices to the registrars or inspectors of these districts; 861 persons could neither be found nor traced; and inquiries have still to be made as to 906. There is as yet no knowledge as to the number of certificates which have been sent in to the registrars. From a casual inspection at the office of Mr. Butterfield, it was estimated that about 30 per cent. of the arrears are yet wanting. It must be remarked that the inspector has at present confined his attention exclusively to the arrears in existence last February. He has not visited a single child born since. He has not prosecuted any parent for non-compliance with the law; and it is considered doubtful if he could obtain the authority of the guardians to do so. Much of the inspector's time is taken up in removing objections to the practice of vaccination, and on this point he thinks that he has been generally successful, but there are undoubtedly many persons who persist in opposition. We heard, for example, of a barrister who has a large family, none of whom have as yet been vaccinated. It would be far better to select such a man for prosecution than the poor and ignorant. The inspector has a large amount of office work, as it is his duty to forward lists of removals to the inspectors of other districts. No action is taken to secure the vaccination of children who are not registered, or whose vaccination is imperfect, it being altogether beyond the capacity of the inspector to form an opinion on the subject. When he has delivered the notice-paper his duty for the time ceases. With respect to the direction recently issued for house-to-house visitation in infected localities, the inspector is of opinion that if he had time to do it, he has not the right of entry, except in the case of known defaulters, and then only for the delivery of the legal notice. As the poor rarely keep certificates, there would be no object in house-to-house visitation, unless to inspect the cicatrices, and that, of course, could only be done by a medical man.

The expenses of carrying out the public arrangements are nearly as follows:—The four vaccinators, say £120 a year; the inspector's salary, £100 a year; the registration of 4000 cases at 3d., £50 a year; rent of stations, £40.

Privy Council Station at the Great Northern Hospital.—We visited this station on the 17th inst. The vaccinator here is Mr. G. L. Cooper, who has long done similar work under the Privy Council. The weather was very unfavourable at 12 o'clock, the hour for vaccination. The number of children brought for vaccination was eight; in addition, three others were brought for revaccination by their mother, who also was revaccinated in consequence of a young man in the house having small-pox. This woman likewise brought her unvaccinated baby to be vaccinated. Mr. Cooper informed us that the week before this 23 cases had been done, several of these being cases of revaccination; the week before that, 22 cases. Often, he said, he had 70 or 80 cases a month; and certainly the station had more a look of life and work than the four public vaccination stations which we visited. Mr. Cooper's mode of vaccinating is as follows:—He aims at making five distinct vesicles in one arm. He does this by a single insertion of the point of the lancet in five different spots arranged in the form of a cross. Previous to using the lancet he bathes the point of it very copiously in lymph, and, after making the five single punctures, lays the lancet point flatly on each. We cannot speak as to the vesicles produced by this mode of vaccinating; for the cases we saw, in which the vesicles were well filled though sometimes small, had not been vaccinated by Mr. Cooper himself, owing to indisposition. Three or four medical men applied for vaccine matter, one of them observing that he had three fresh cases of small-pox in Pentonville. These gentlemen were all amply and courteously supplied by Mr. Cooper, some in tubes and some on points.

THE death is announced this (Thursday) morning of Sir James Arnold Knight, M.D. He was a son of Mr. Alexander Knight, of the Hills Grange, Lincolnshire, and was born in 1789. Having studied medicine and taken his M.D. degree in 1811, he practised for many years as a physician in Sheffield. He was married in 1821 to a daughter of Mr. Thomas Milnes Smith, of Dunston Hall, Derbyshire.—*Pall Mall Gaz.*

THE LANCET.

LONDON: SATURDAY, JANUARY 21, 1871.

THE present is a critical moment in the history of the medical profession in this country; and if the general body of practitioners cannot be speedily roused from their inactive state, they are likely to pay a deserved but severe penalty for their apathy. We used exceeding plainness of speech in our remarks last week on the half-and-half character of the scheme put forward by the Reform Committee of the British Medical Association; and we warned our brethren that such feeble plans, which had no savour of reality to recommend them to general approval, would infallibly be ridden down by the vigorous and consistent action of the three London corporations in favour of their own cheme for absorbing all power into their own hands. That scheme is now being promoted with all the energy, and backed by all the weight of interest, that the two Colleges and the Apothecaries' Hall can bring to bear; and there is no small danger of a result which would be ludicrous if it were not most disastrous. The force of audacity could surely no further go than to propose that a one-portal system of examination should be entrusted to the three bodies who are mainly responsible for the present backward condition of scientific medical education in this country. Not one step in the path of improvement which these corporations have taken during the past thirty years was spontaneous; they have been forced along every inch of their poor little progress by the pressure of the general profession and of disinterested leaders of science. They have so negligently conducted the business of examination as to confer their licences on crowds of persons whose ignorance (as tested by Professor PARKES and others at the army medical examinations) was ridiculous and shameful. The revelations on this point that have been made within the last few years have filled the minds of well-educated practitioners all over the country with mortified indignation; and for five or six years past the profession has been demanding legislation that shall make it impossible for competent men to be confounded with such miserable pretenders to knowledge and skill as are now too often legally included within the ranks of the profession. Unfortunately there has been no centre and rallying point for united action; and in one instance the profession would have been better without any leaders at all, for the leading of the British Medical Association has been an almost unmixed mischief. The general body of that Association is composed of intelligent and excellent practitioners; but its management is conducted by one of the narrowest cliques that it would be possible to find anywhere, and under such guidance the Association has failed to adopt any high-minded or statesmanlike general policy. It is a singular fact that the British Medical Association, which (in its original shape as the "Provincial") was the mere offspring and embodiment of the enthusiasm excited many years since by the declaration of THE LANCET in favour of the one-portal examination and other liberal reforms, should be committed by its leaders, at the present moment, to a narrow-spirited competition with the scheme of reform propounded by this journal—an opposition which, if effective at all, can only issue in the triumph of the London corporations in consequence of the division created in the ranks of the general profession.

We call earnestly on the profession to vindicate its honour, and to resist the unwarranted assumptions of the London corporations in the only effectual way which is really open to them—viz., by supporting THE LANCET Medical Bill. We shall not pretend to feel any hesitation or false modesty about this matter; for in suggesting a plan of medical reform we have aimed at no dictation whatever. We have merely endeavoured, from a necessarily disinterested point of view, to show the great body of practitioners the only way in which, as it seems to us, real reform can be obtained; and in doing so we have followed strictly in the lines of policy laid down for us long ago by the late Mr. WAKLEY—a reformer whose intelligence and foresight are now no longer disputed by anyone who knows the history of all that he did for the welfare of the profession. We invite our brethren in the provinces, and more especially in the large towns, to hold meetings and to prepare petitions in favour of the Bill which we have sketched. The occasion is urgent, and no should be lost if we are to escape being loaded with the incubus of a Medical Bill which should deliver us bound hand and foot into the power of the three corporations. We call on the universities, too, to help us; and surely it is scarcely possible that these learned and really dignified bodies can be content to endure the yoke of the obscurantist party. We should, indeed, wellnigh despair of the medical republic if we could believe that it will complacently submit to the greatest insult, as well as the most serious injury, that has been aimed at it during the present generation.

Finally, we appeal to the members of the British Medical Association to repudiate the action of their Reform Committee, and to join us in one hearty effort to secure legislation which may place the profession for the first time on a really satisfactory basis. They gave us their intelligent support in our efforts to prevent the passage, last year, of an incomplete and unsatisfactory Bill; and we may fairly hope that they will now also support us in our endeavour to carry a measure which shall give satisfaction to independent reformers.

THOSE of our readers who have perused "Ginx's Baby"—and we advise all who have not to do so—will not fail to have carried away the moral that lay upon the surface. There was no interest whatever in the baby as a baby. It was only in so far as that unfortunate infant was capable of being made available as a subject of contention by different sects and parties that it possessed the slightest interest. It is just possible that certain of those who are fighting so zealously in defence of some of the frailer members of the female sex may be actuated by similar feelings. That the operation of the Contagious Diseases Acts has been of considerable benefit appears incontrovertible, the

opponents of the Acts and their organ (the *Shield*) to the contrary notwithstanding. We have before us the *Hampshire Telegraph and Sussex Chronicle* of the 11th inst., containing the report of the annual meeting of the Governors of the Portsmouth Hospital; and it so happens that these Acts were among the subjects discussed by them. Lock wards of limited extent were originally opened in consequence of a correspondence between Mr. GRANT, a former chairman of the hospital board of governors, and Sir CHAS. ROBINSON, inspector at Haslar Hospital, the Government having granted £1800 for that purpose. In progress of time these wards were found to be quite inadequate. They were filled, and failed to meet the evil. Mr. GRANT, who for thirty-five years had been a close observer, described the state of affairs as something dreadful. Unfortunate creatures, after continuing about the streets for some time, were taken to the union, and very speedily to the cemetery. They had no alternative, for there was no home to which they could go. Ultimately Lord NORTHBROOK was appealed to; and, doubtful as his Lordship was at first, there is now "no stronger advocate of the Acts." "There had been," said the chairman of the meeting, "great agitation in the country on the subject, got up by deluded but well-meaning women, who had advocated the repeal of the Acts, and who went about the country alleging that they [the Government] were about to establish the French system of licensing prostitutes; but the fact was that they were doing no such thing. They were offering a refuge to those who were in a dreadful condition." It was equally a delusion to say that the women themselves were not in favour of the Acts. The petition to the House of Commons was in twenty-four hours signed by nearly all the women in the wards, and by seventy women in the streets of the town. The chairman expressed his emphatic approval of this piece of legislation, and added: "The question will be agitated in the House of Commons next session; but he did not believe the good sense of the country would allow the Acts to be repealed." The Mayor of Portsmouth expressed his amazement at some of the statements put forward in the papers by clergymen and ladies in various parts. The grievances, he believed, were purely sentimental, and based entirely on misrepresentation. "It was astounding how men would get hold of a statement, work it about, and exaggerate it to almost any extent. Figures were manipulated with an ease that made them prove anything." Viscount TEMPLETOWN, who was a member of a committee of the House of Lords which inquired into the advantages or disadvantages of these lock hospitals, also expressed his belief that the good results in the Portsmouth garrison of the Contagious Diseases Acts could not be exaggerated. So much for the opinions of those who have had the best opportunities of watching what has been the effect of their operation at Portsmouth, and who have had no reason whatever to regard them in any but an impartial frame of mind. But we may go further, and declare that, on moral and religious grounds, the working of the Acts has been attended with immense advantage to the women themselves. At the present moment there are two women employed as servants in the hospital who came there in the first instance diseased. The treasurer of the hospital, after confirming all that the chairman had urged, declared that, when the wards were established, the authorities of the hospital would have nothing to do with the proposal unless they were in a position to offer a refuge to these poor women; and they had looked about to see what could be done. They entered into an arrangement with the Committee of the Penitentiary, which was then struggling to keep its head above water. "At that time there were ten patients in it; and they had gone on until they now had forty-six." We hope that the suggestion of Mr. GILLMAN, the treasurer, may be carried out, and that the Government may be induced to supplement the work of arresting a great physical evil by another and a higher one—that of the reclamation of the individuals themselves.

AT the meeting of the Epidemiological Society on the 11th inst. a paper of remarkable interest was read, on the Cholera Epidemics which have prevailed in East Africa, communicated by JAMES CHRISTIE, M.A., M.D., of Zanzibar. It is not too much to say that this paper opens an entirely new chapter of the history of epidemic cholera. In the different histories of this formidable epidemic, partial or general, which have from time to time appeared, East Africa, either inferentially or positively, has been dealt with as if it had possessed an immunity from this pestilence. When the great outbreak at Zanzibar in 1869–70 occurred, not a few of those who were presumed to have special knowledge of the subject, and some of those who were thought to have particular means of acquiring knowledge of the locality, believed that this was the first epidemic of the disease in East Africa. Readers of Captain BURTON'S "Lake Regions" of this division of the African continent, and of the works of other East African travellers knew otherwise. But it is remarkable that the incidental allusions in these works to epidemic cholera, as prevailing on the East African coast in 1865, and at a much earlier date, should commonly have escaped the notice of epidemiologists. It is not remarkable, however, that our ignorance should have been as great as it is now shown to be by Dr. CHRISTIE'S paper. For the means of obtaining information concerning events on the East African coast are so few, so out of the ordinary course of news, that, except under extraordinary circumstances, such as the recent frightful outbreak of cholera there, it would be astonishing if it were otherwise. Indeed, the International Sanitary Conference held at Constantinople in 1867 did not seem to have any knowledge of cholera in East Africa at any time, notwithstanding its unusual facilities for obtaining information.

The mode in which the facts disclosed by Dr. CHRISTIE have been brought to light deserves to be noted. We are indebted for them, in the first place, to persistent effort on the part of the Epidemiological Society. It would appear that certain incidents connected with the capture of Arab slave boats in the Gulf of Aden, during the early period of the cholera epidemic of 1865, had raised suspicion in the minds of the executive of the Society that cholera might have been prevailing somewhere in East Africa contemporaneously with the prevalence of the disease in the Hedjaz. It was not, however, until the past year that the means presented themselves for solving the question. Then an opportunity occurred of sending certain queries to

the Right Rev. the Bishop of Central Africa, Dr. TOZER, resident at Zanzibar. These queries were placed by the Bishop in the hands of Dr. CHRISTIE; and, in answer to them, that gentleman has given the Society a new chapter in the history of cholera. At the same time the Society had appealed to Mr. SIMON, the Medical Officer of the Privy Council, and to his kindness and interposition with the Foreign Office it has been indebted, after a considerable delay, for extracts bearing upon the subject from the official correspondence of H.M.'s Acting Political Agent and Consul at Zanzibar, Dr. KIRK. These extracts were read at the meeting of the 11th inst.; but they did not contribute any additional information of importance to that given in greater detail by Dr. CHRISTIE. Dr. KIRK had, indeed, placed at the command of Dr. CHRISTIE, the latter tells us, for the purpose of his paper, the facts regarding cholera in East Africa contained in the records of the Consulate.

Dr. CHRISTIE'S paper (which we shall be enabled to present to our readers without curtailment) describes four epidemics of cholera in East Africa: one in 1835–36, another in 1859–60, a third in 1865, and a fourth in 1869–70. Of the additional light regarding the dissemination of cholera which may be obtained from Dr. CHRISTIE'S account we do not propose to speak. The discussion of the paper has been postponed by the Epidemiological Society until its February meeting; and we shall reserve our remarks upon the subject until the discussion is over. In the meanwhile we would express our sense of the great value of Dr. CHRISTIE'S contribution to the history of cholera.

TOLDT has recently published in the Transactions of the Vienna Academy an essay on the Physiology and Histology of Fat. In opposition to the statements of VIRCHOW, who maintains that fat-cells are to be regarded as the cells of connective tissue filled with an oily fluid, and are therefore constantly associated with this tissue, TOLDT gives as the general results of his inquiries upon the intra-spinal fatty tissue that this, at least, is an organ of a peculiar nature, which neither in regard to its structure nor function can be included amongst the connective tissue formations. In order further to demonstrate that adipose tissue is independent of connective tissue, he refers to the characters and relations of fat in the Batrachia. The masses of fat that surround the uro-genital apparatus of these animals in the larval state consist of large, round, transparent, nucleated cells, not separated by any intervening substance except bloodvessels. Passing to the Mammalia, he points out that the first formation of fat in the embryo occurs around the kidneys, and thence gradually extends into the connective tissue of the mesentery after birth. He considers a strong argument in favour of the independency of the adipose tissue to be the fact that it always has, down to its smallest lobules, its own proper and closed system of bloodvessels, which, it is curious to observe, very closely resembles that of the acinous glands. These researches of TOLDT enable us to explain the absence of fat in regions where everything appears to favour its formation, as in the sub-muscular connective tissue of the intestinal canal. It explains also the persistence of the tissue, with its characteristic features, even when all the oily matter has been removed by absorption. Whilst fully concurring in the general statement that fat-cells possess in mature adipose tissue a distinct membrane, he differs from CZAJEWICZ in maintaining that when first formed they are destitute of a membrane, this only becoming visible in the later embryonal periods. The minute masses of protoplasm they contain, however, remain throughout life. He makes an interesting observation to the effect that spring frogs that have fasted through the winter, and are excessively lean, present fat drops in which no membrane is distinguishable, but which, reduced to their protoplasmic primary mass, possess the power of amœboid movements. From the consideration of these facts, M. TOLDT has arrived at the conclusion that the protoplasm of the fat-cells, when supplied with sufficient nutriment, is capable, like a gland-cell, of forming fat as a kind of secretion; and, inversely, when the consumption of oxidi able material exceeds the supply, it possesses the power of using up the stored-up fat and discharging it into the blood. The mode in which fat is laid up has also been investigated by FLEISCHER, with a view of determining whether, in accordance with LIEBIG'S idea, the amylaceous compounds ingested are converted into fat directly; or whether, as VOIT thinks, the fat consumed in the economy is derived from the fat of the food, and that the amylaceous compounds are only serviceable as readily combustible compounds, by means of which the fat developed from albuminous compounds, and already present in the body, are preserved. The results of his investigations on cows, which were both numerous and extended over a long period of time, were on the whole unfavourable to VOIT'S views.

WE have already said that, in our opinion, more prominence should have been given by both the Privy Council and the local authorities to the subject of Revaccination. There can be but one opinion as to the wisdom and even the necessity of it. No sensible man will rely on his primary vaccination, unless he lives in a position of unusual safety, and has exceptionally favourable cicatrices either in point of number or depth. Only fanatics of the anti-vaccination order now talk as if the first vaccination were vaunted as a permanent protection against small-pox, and abuse it because the protection is not permanent. We urge upon the profession that they should set forth the extreme importance of revaccination. The effect of the first vaccination clearly tends to wear out. From the early part of the century cases of small-pox after vaccination have been increasing, and now amount to four-fifths of the cases. Mr. MARSON anticipates a time—he seems to have more hope than we have of the prevalence of law and wisdom in the world—when, every parent having complied with the compulsory Vaccination Act, there will be no unvaccinated person in the country, and that all the cases of small-pox will be in vaccinated persons. As it is, the large majority of cases of small-pox occur in persons who have been vaccinated after a fashion. But here is the point: no cases are reported after revaccination. Revaccination, performed carefully with fresh lymph and plenty of it, will protect from the disease absolutely; at least it has been found an absolute protection to the nurses of the Small-pox

Hospital for more than thirty years. And it is the protection under which medical men attend cases of small-pox. The immunity conferred by one attack of such a disease as scarlatina or small-pox is relative, not absolute. It occasionally happens that a person suffers a second attack of small-pox. The susceptibility of the constitution to the action of the variolous poison can be tested in only one way—by vaccination; and it is requisite that the operation should be occasionally repeated for an individual to obtain all the protection that it can secure.

Medical Annotations.

"Ne quid nimis."

THE SOURCE OF SCARLET FEVER POISON.

WHILST we know much of its mode of operation upon the body, we remain profoundly ignorant of the nature and source of the poison of scarlatina, and he must be a bold man who will venture to erect, upon our present stock of data, a theory as to its origin. Dr. Carpenter, of Croydon, however, who speaks with great authority on sanitary matters, has broken fresh ground on this point, and, in a very interesting and suggestive paper read to the Medical Society on Monday night, brought forward a series of facts which, he believes, go far to show that the poison of scarlet fever is an emanation resulting from incipient decomposition of the blood of vertebrated animals, either healthy or diseased, and produced under the influence of certain conditions of temperature, magnetic state, and moisture; this poison being more virulent, perhaps, when produced from diseased blood. Dr. Carpenter detailed the history of various outbreaks of scarlet fever occurring in localities where slaughter-house refuse had been freely used as manure, or in houses contiguous to places at which it had been stored, or such as were so placed as to receive emanations from decomposing blood. Dr. Carpenter did not deny the contagiousness of scarlet fever, but he argued for its origination as it were *de novo*, in the manner indicated. He further stated that, though the enforcement of ordinary sanitary precautions, such as are now in force, did not prevent the occurrence of the disease, yet it very materially influenced the mortality; and he adduced a number of facts, which he gathered from the condition of Croydon, to show that in those houses from which sewer emanations were rigorously excluded, and in which ventilation and cleanliness were observed, scarlatina was robbed of its virulence, and became a mild affection; where as in the badly-sewered and badly-built portions of the town the disease was very fatal. He expressed the belief that scarlatina would be shorn of its fatality if blood were not allowed to be shed in our towns and villages except under proper regulations by which it should be excluded from the sewers, and our houses were properly hygiened. Such is the gist of Dr. Carpenter's paper, which we shall publish next week.

DR. GREENHOW'S "ENCYCLICAL."

WE regret that there should be any occasion for further notice on our part of the letter which Dr. Greenhow thought fit to pen in reply to a recent article in this journal upon the question of the amalgamation of the medical schools of London; but Dr. Greenhow has left us no choice in the matter. Actuated by a desire to forward the success of a most important piece of educational reform, we mentioned with satisfaction that steps were being taken to open negotiations upon the question of union between the University College, Middlesex, and St. Mary's hospital schools; and we reiterated the points upon which a general agreement seemed to exist, as far as might be judged by what had already been done and said on the matter. Our columns were open to Dr. Greenhow to set us right if we were in error, or to criticise any of the statements made, as, indeed, the publication of Dr. Greenhow's letter showed. In addition to availing himself of the ordinary and recognised means of correcting alleged erroneous statements or misconceptions, Dr. Greenhow, acting as though he were infallible, decided in hot haste to ventilate his groundless objections and grievances in the columns of our contemporaries by the aid of a circular letter, in which he has entirely misrepresented the obvious meaning of our remarks, and without affording the readers of our contemporaries the means of comparing for themselves our comments with his own statements, or waiting to see whether it was not possible that he was mistaken. We contented ourselves last week with giving Dr. Greenhow's communication—which we little imagined to be a circular letter—a prominent place, and showing in what way Dr. Greenhow had erred, whilst we expressed a belief that the highest motives actuated those who were interested in the question. But we must now add that Dr. Greenhow will find little satisfaction in having been the first to discuss the question in an illiberal and contentious spirit, and to suggest, as the last paragraph of his letter does, the possibility that mere selfish motives might actuate those who were seeking amalgamation. Dr. Greenhow, in his circular letter, contradicts himself. He first denies that any "active steps are being taken, or have at any time been taken by the Middlesex Hospital Staff or Medical School, towards amalgamation with either of the other schools" named in our article, and immediately afterwards admits *that he and certain of his colleagues took part in negotiations having for their object the formation of a scheme which might be submitted to his colleagues.* Does he mean to say that he was acting without the tacit sanction of the Middlesex Staff? Certainly not, for he further speaks in the name of the whole staff of his school, and as its treasurer, as to what they would or would not do. "I may further state on the part of the Middlesex Hospital and Medical College, that there is no desire to enter upon any such negotiation, unless, &c." On the face of it Dr. Greenhow's own words place him in a false position. His mode of dealing with our simple comments on the subject, no less than the spirit and contents of his circular letter, are in as bad taste as they are wanting in common courtesy. He sets a bad precedent in the discussion of a very important question.

THE FEMALE MEDICAL STUDENTS.

CLEARLY the lady students at Edinburgh are not to be expelled by any corporate *furca*. After their defeat by a majority of six at the now famous meeting on the 2nd inst., they have returned to the charge; and on Monday last the contributors to the Royal Infirmary met once more to discuss the question of the admission of lady students to its clinical courses. The Lord Provost presided; and the Rev. Dr. Charteris, Professor of Biblical Criticism, moved "That, in the opinion of the Court of Contributors, it is highly desirable that the managers of the Royal Infirmary should make immediate arrangements for the admission of all registered students of medicine to a qualifying course of instruction in that institution." The motion was seconded by Sir James Coxe, one of her Majesty's Commissioners in Lunacy. Professor Muirhead, of the Faculty of Law, moved as an amendment, "That the Court is of opinion that the question of admitting students, whether male or female, to

clinical instruction in the wards of the Infirmary ought to be left entirely to the decision of the managers." The amendment was seconded by Dr. Gillespie. After a good deal of noise—the room having to be cleared of the non-contributors,— the votes recorded for the amendment were announced to be 211, and those for the motion 191. The former was, therefore, carried. It is proper to add that twenty-two of the students memorialised the managers to reconsider the case of the lady applicants, whom the University has admitted as students, and who have been for some time engaged in striving honourably and successfully to gain a knowledge of medicine. "It is great injustice," the memorialists plead, "to attempt to bar their further progress by refusing them permission to attend the practice of the Infirmary." The memorialists add: "Our feelings have been outraged by the unthinking and misguided of our own class who oppose the ladies. For their disgraceful actions we would seek to atone by asking your honourable Board to make some arrangement by which the ladies may be admitted to the practice of the wards." As a matter of compromise, the memorialists respectfully request that the ladies be admitted to the wards of the three medical gentlemen who are willing to receive them. If this could be done without prejudice to the rights hitherto enjoyed by the male students, the Edinburgh school would certainly keep faith with the ladies whom it has allowed to proceed thus far on their curriculum, and it might thereafter make such arrangements as it deemed proper. But we adhere to our former opinion, that the best course for the ladies and their friends to pursue, if they are determined to carry out their design, is to establish a qualifying Infirmary for themselves.

SMALL-POX IN LONDON.

ONE hundred and thirty-five deaths from small-pox were registered last week in London—a mortality equivalent to 22 deaths annually upon every 10,000 of the present estimated population. The falling off which the return for the previous week exhibited was merely a fortuitous circumstance, not a true indication of the actual progress of the disease.

The Registrar-General is evidently desirous of doing all in his power (consistently, of course, with due official reticence) to awaken public attention to the alarming character of the present epidemic. He states in his last Weekly Return that the greatest number of deaths previously recorded from small-pox in any one week, since the passing of the Compulsory Vaccination Act (1853), was 71 in the week ending 9th May, 1863, the fatality of the disease during seven consecutive weeks at that time averaging 66 deaths per week, whereas the average for the past seven weeks is 81 per week.

As to the diffusion of the epidemic in different parts of the metropolis, the mortality returns can give at best only approximate information. But, so far as they go, they serve to show beyond question that its incidence is being increasingly felt in the East districts, and that there has been a rapid development of it in the Western districts within the last month. After making a necessary correction for the deaths registered in the Hampstead and Islington Small-pox hospitals, the mortality from small-pox last week was equivalent to an annual death-rate per 10,000 of present estimated population of 24 in the Western, 14 in the Northern, 20 in the Central, 45 in the Eastern, and 10 in the Southern group of districts. How recent and severe has been the outbreak in the Western districts, may be gathered from the fact that out of an aggregate of 83 fatal cases returned during the last fifteen weeks, 50 have occurred within the last three weeks. Westminster is suffering terribly; indeed, 46 out of the fifty deaths just referred to have been returned by the two subdistricts of St. Margaret and St. John, Westminster. Last week there were 70 deaths registered from all causes in these two subdistricts, and 21 of them resulted from small-pox. Three children in one family, the Registrar-General remarks, were carried off in St. John subdistrict, whilst the registrar of St. Margaret is said to have appended notes to his return which "evidence a most deplorable neglect of vaccination among the population."

The inexorable logic of these bare, sad facts is superior to the most eloquent comment.

TRANSPIRATION OF WATERY FLUID BY LEAVES.

WE learn from the number of *Nature* for Jan. 5th that Professor McNab has been pursuing his investigations on the transpiration of watery fluid by leaves. The plant used in all experiments was the common laurel (*Prunus laurocerasus*), and the fluid to test the rapidity of the ascent lithium citrate. The following are some of the more important results arrived at:—The total quantity of water in the leaves was found to be 63·4 per cent., but of this the proportion of that which could be received by calcium chloride, sulphuric acid, or by the action of the sun, was only from 5 to 6 per cent.; hence Dr. McNab calculates the amount of transpirable fluid in the stem and leaves to be between 6 and 7, the amount of fluid in relation to cell-sap to be between 56 and 57 per cent. The rapidity of transpiration he found to be in sunlight 3·03 per cent. in an hour; while in diffused daylight it was only ·59, and in darkness ·45 per cent., in the same time. These experiments were made when the plant had access to water by means of its stem. When the leaves were exposed without any means of supplying themselves again, the following results were obtained:—In a saturated atmosphere in the sun, 25·96 per cent. was transpired in an hour; in a dry atmosphere in the sun, 20·52 per cent. In the shade, the numbers were reversed—viz., in a saturated atmosphere, nothing; in a dry atmosphere, 1·69 per cent. When immersed in water, the leaves absorbed 4·57 per cent. of their weight in seventeen hours; in a saturated atmosphere, nothing whatever in eighteen hours. The under surface of the leaf transpired nearly ten times as much as the upper surface.

MR. NUPKINS UPON SCIENCE.

SAM WELLER is recorded to have illustrated the impartiality of the "great unpaid" by the observation "that there wasn't a magistrate going as didn't commit hisself twice as often as he committed other people." We learn from the papers that a metropolitan stipendiary has displayed a seeming desire to be at one with his provincial brethren in this respect.

"A decent and respectable-looking man" waited upon a sitting magistrate with a truly harrowing tale. He said his wife had recently been confined. She was delivered of what the doctors called a "monstrosity," the upper part of the body being complete, and the lower extremities something resembling a fish. He requested the doctor to give up the body to him for immediate interment, but he refused to do so. The magistrate asked what reason was assigned for the refusal. The applicant replied that the doctor said he wanted it for scientific purposes, but that he himself did not want it to be made a show of. In fact, he wanted it to be removed to a cemetery as soon as possible. By the advice of the learned legal functionary, the applicant went again to demand the body, and returned saying that the doctor now said he had not got it. The magistrate then directed a warrant officer "to proceed immediately to the

medical man, and tell him that unless he instantly gave up the body, he must attend before him and give—*his reasons for detaining it.*"

We should have fondly hoped that anyone elevated to the dignity of a magistrate would have had sense enough to know that monstrosities are sometimes valuable to physiologists, by reason of the light they may throw upon obscure questions of development; and would therefore have assured the decent man, first, that there was no fear of the monstrosity being made a show of, and next that there was every reason why he should overcome his very natural personal feeling in the matter, and should acquiesce in an arrangement that might be useful to mankind.

We have lately seen the Bench make itself the abettor and exponent of ignorant prejudices about post-mortem examinations at hospitals; and the present case seems to be one of a parallel kind. We would counsel the magistracy to leave the worship of the working man to professional politicians, and to throw their influence into the scale of common sense and education.

OUR PUBLIC SCHOOLS AND THE PREVAILING EPIDEMICS.

"BACK from the holidays,"—never a very cheerful proceeding for the English schoolboy—happens to be a much graver one this half than his parents and guardians, we fear, are properly aware of. For several weeks past, two most virulent epidemics have been raging over the country; not for many years, in fact, have scarlet fever and small-pox overtaken a larger number of victims. Now these diseases are eminently communicable, and the arrival of one boy affected with either of them, or exposed to its infection, might convert a previously healthy school into one great hospital. Calling to mind the experience of Marlborough College last year, we cannot but look with the utmost anxiety on the simultaneous reassembling of many thousands of boys from every part of the country, and their association beneath one roof. Living, as they all must till Easter live, under precisely the same conditions in each school, the mischief that one fever-smitten or small-pox-smitten boy might do in any one of those institutions is incalculable. There are two precautionary duties which we hope will be fulfilled without delay: the first is that of parents and guardians exercising the most perfect candour in informing the heads of the schools to which their sons or daughters are about to return, as to whether they have been exposed to any contagious or infectious disease; the next is the duty of heads of schools and colleges making every provision for the disinfection and for the thorough salubrity of their establishments. On leaving home each boy should have with him a medical certificate of his fitness to rejoin his class-fellows; while the medical man should have examined every school and pronounced its sanitary arrangements unexceptionable before its re-opening. Both at the point of departure and the point of arrival, a clean bill of health should be found for the schoolboy, otherwise the risks that the rising generation will run during the last weeks of winter and the first weeks of spring are dreadful to contemplate.

"HOSPITAL SUNDAY" IN LIVERPOOL.

A LIST of the collections made in the Liverpool places of worship, denominationally classified, on Sunday, the 8th inst., shows that fifty-four Church of England congregations contributed £1913, twenty Roman Catholic congregations £160, and seventy-three congregations of all other denominations £1820. Some of the individual results were truly munificent: for instance, the collection at two Unitarian places of worship amounted to £537, at one Independent chapel the sum was £236 13*s.*, five congregations of the Church of England contributed between them £734, and from one Baptist chapel the return was £176. The total amount thus reported is £3899 13*s.* 5*d.*; but as some returns not yet made will have to be included, and as other collections for the same object are to be made during the month, the grand aggregate result of the first "Hospital Sunday" in Liverpool can hardly be less than £4000, and may be somewhat more. According to a statement which we saw not long since in a Liverpool paper, what has previously gone by the name of "Hospital Sunday" produced in twenty years at least £20,000—i.e., an average of £1000 per annum. The last of this twenty-years' series of collections yielded £1125, of which only £700 went to benefit the medical charities of the town; so that these charities will get nearly as much by the single "Hospital Sunday" of this year, as they have got out of six years' collections on the old principle.

It is a matter of sincere gratification that a movement which we have striven so often and so earnestly to promote, has, in the case of Liverpool, added one more instance to those already on record of its perfect adaptability as a means to an end, even under comparatively inauspicious circumstances. For the history of the movement in Liverpool shows clearly that it has become *un fait accompli* there only after much discouragement, bravely encountered and finally overcome. All possible credit attaches to those who have locally striven in so good a cause, and we are sure that its success will amply recompense them for their exertions in the matter. That some such measure was urgently called for is evident from the fact that at the Liverpool Northern Hospital annual meeting, held last week, the report showed the institution to be in debt to the extent of £1743, with a decreasing income, and no alternative but to close a portion of the building, or else to trench upon capital, unless additional funds were forthcoming. The share which the Northern Hospital will get of the proceeds of "Hospital Sunday" this year can hardly suffice for clearing off its debt, though it will no doubt go a good way towards doing so. In so wealthy and prosperous a city as Liverpool, we will not believe that a noble medical charity like the Northern Hospital will be compelled to contract its sphere of operations from the want of money. An immediate strenuous effort ought to restore its present crippled finances; and, as to the future, let the promoters of "Hospital Sunday" take time by the forelock, and extend their organisation so as to bring into co-operation next year all those congregations in the town and suburbs which yet stand aloof, and by degrees all other congregations lying within the area (whatever its extent) deriving benefit from the medical charities of the town.

RETIREMENT OF F. J. MOUAT, M.D., F.R.C.S.

WE have already announced the fact of Dr. F. J. Mouat's retirement from her Majesty's Indian Service. Considering the prominent part which Dr. Mouat has so long played in the medical, sanitary, and educational questions affecting India, and the impetus he gave to them, it is not surprising that his retirement should be a subject of regret to the numerous classes who have been benefited by his energetic and enterprising labours. Deputations on behalf of the Hindu community of Bengal and of the Mahomedan community presented Dr. Mouat with addresses, and the Bethune Society of Calcutta passed a resolution expressive of the sense it entertained of his valuable services. It was under Dr. Mouat's auspices, as secretary to the Council of Education, that the great principle of native education, inaugurated by the late Lord Macaulay during the administration of Lord William Bentinck, found its development.

During his tenure of the same office Dr. Mouat originated the idea of Indian universities, and the scheme that he had projected as early as 1846 eventually became the basis of the flourishing University of Calcutta. His labours in introducing various improvements into the gaols of India and in improving their disciplinary system are well known. We are glad to notice that it is intended to connect Dr. Mouat's name with an annual prize medal which the Hindu community desire to institute, with the leave of the Syndicate of the University of Calcutta; and we can only join his various Indian friends and well-wishers in hoping that many years of health and happiness are in store for him now that he has returned home.

DR. ACLAND ON HOSPITALS AND HYGIENE.

ON Friday, the 6th inst., by request of the workmen employed on the new fever ward of the Radcliffe Infirmary, at Oxford, Dr. Acland delivered a lecture on Hospitals and their Management, with reference to the public health. All who know Dr. Acland, or who have read his "Memoir on the Cholera at Oxford in 1854," his "Report on Fever in Great Horwood," and his lecture on the "Oxford Museum," will be at no loss to imagine the pleasure with which his audience listened to his exposition of the primary essentials of life and health, personal and public; of the inutility of strong drugs while people neglect to secure the requirements of healthy life; and of the mode of estimating the efficiency of hospitals. He dwelt with much impressiveness on the advantages enjoyed, yet unappreciated, by hospitals for the training of nurses, not only in tending the sick, but in cooking for them, and, indeed, for the healthy public generally. He concluded by congratulating his hearers on the contemplated establishment of a cottage hospital in Oxford, and on the benefits that would flow from it. To all who value lucid discourse on subjects of pressing sanitary importance, it will be satisfactory to know that Dr. Acland's lecture will be made *publici juris*.

INFANT MORTALITY AT PARIS.

WRITING on the 2nd of April last year on the frightful mortality of nurslings in France, we said:—"Decreasing as her population is, she may well look forward with alarm to the future, and should in the meantime think of 'rectifying' her sanitary rather than her political 'frontiers,' if she is to maintain her historical position among the nations of Europe."

Our warning has received a far speedier and sterner justification than we could have anticipated; and now that her very high infantile death-rate is enormously enhanced by the privations of war, her domestic forecast is almost as gloomy as that which Horace presented to the Romans after the murder of Cæsar—

> Audiet pugnas, vitio parentum,
> Rara juventus!

Out of every thousand children under a year old, 288, according to Dr. Berthillon, perish in the Marne, 295 in the Oise, 307 in Seine et Marne, 313 in Yonne, 318 in Seine Inférieure, 319 in Eure, and in the department Eure et Loire (dedicated "aux petits Parisiens") 370! Is not this an appalling return? Dr. Berthillon speaks of it as a "girdle of mourning round Paris," and grimly reproduces the metaphor in his map. But even with this death-rate familiar to them, the Parisians announce that it is far exceeded in the city itself during these months of investment. "Paris papers of December 28th, found on Mont Avron, describe the mortality of infants in the city as fearful."

Bacon, in a well-known passage, says of the father of a family that he has "given hostages to fortune." But in France these hostages appear to become victims as soon as they are delivered; they pay the debt of nature before they have well incurred it. Meanwhile the prospects of peace are as remote as ever, and a heavier visitation seems in store for France than the destroying angel inflicted upon Egypt.

SMALL-POX AT THE WEST-END.

THE fact of there being at present in St. George's Hospital eighteen cases of small-pox affords additional evidence of how surely the epidemic is spreading through a certain stratum of London society, and though the fact need cause no panic among the more favoured classes, it should warn them to fortify themselves against infection by observance of all ordinary precautions. Up to the 7th inst. there were only two examples of this disease in the hospital, and every care was taken to isolate them from the other patients; but, after that date, fresh cases suddenly broke out in the various wards, chiefly among patients who had been under treatment for some time, and to whom, as far as can be judged, the infection was conveyed by their friends. Two wards, situated at the top of the building, each of which is capable of accommodating fourteen patients, have been set apart for their reception; and a number of regulations, which comprise every possible means of isolation and disinfection, have been put in force by the Hospital Committee. The entire staff of nurses were revaccinated some weeks ago, and the friends of patients are allowed to visit the wards only on emergency, and by special order.

FEES TO MEDICAL WITNESSES.

A CASE of some importance, as regards the principle involved, has recently occurred at Wolverhampton. It seems that a person was charged with maliciously wounding another, and that the magistrates dismissed the case. Complainant had been taken to the hospital, and Mr. Snow, the house-surgeon, was called to speak to the nature of the injuries received. On the dismissal of the case, the magistrates told Mr. Snow that they had no power to grant him any fee for his attendance. Mr. Snow appealed to the Home Secretary, who referred the matter to the Examiners of Criminal Law Accounts; and these gentlemen wrote that it seemed to them that Mr. Snow was entitled to his fee, subject to the discretion of the justices presiding. Mr. Bruce, in communicating this opinion, remarked that he himself thought the fee should be paid to Mr. Snow. The clerk to the magistrates said that the fee, if granted, would have to be paid out of the local funds, and would not be repaid (as there was no committal) out of the consolidated fund. Ultimately the Bench decided to grant a certificate stating that they thought the fee should be paid; and this certificate will bring the question before the next Court of Quarter Sessions for decision. We think Mr. Snow is entitled to the thanks of the profession for having pushed his claim. It is simply monstrous that the fee of a medical witness, in a criminal case, should be dependent upon a committal; especially as his evidence may be that which prevents the committal, and saves the county the cost of a useless imprisonment and trial. The case is well worth remembering as a precedent.

THE AMERICAN COMPASS PLANT.

THE current number of the *Popular Science Review* refers to a paper read by Mr. Thomas Hill before the American Association, at the last meeting, in which he states that as he was travelling from Omaha to Chicago, on a very dark day, he noticed, at three different points of the prairies, young plants of *Silphium laciniatum*, and estimated from

them, while going at full speed, the course of the railway track. On reaching Chicago he procured, by the kindness of the officials, detailed maps of the track, and found, when he had estimated the bearing at 35°, 75°, and 90°, the true bearings were 31°, 78°, and 90°.

In October, 1869, being detained by an accident at Tama, he gathered seed, and last spring raised a few seedlings. Drought and insects destroyed part of them, and he could only give the history of eight plants, with fourteen leaves. Ten of these leaves showed a strong disposition, when about four inches high, to turn to the meridian; the other four showed a feeble disposition in the same direction. These ten leaves, on coming up in June, had an average bearing of 42°, and the mean bearing was nearly as large. But in August the same ten leaves showed an average bearing of only 4° 30′, and the mean bearing was only 2° 30′. Mr. Hill refers this polarity to sunlight, the two sides of the leaf being equally sensitive, and struggling for equal shares.

MR. CHILDERS.

WE regret that we are unable to give so favourable an account of the health of the First Lord of the Admiralty as on some former occasions. It appears that Mr. Childers is suffering from a great depression of nerve-power, rendering any exertion, either of mind or body, disproportionately exhausting to him. This has supervened upon two consecutive attacks of a vertiginous character, the effect of over-anxious and long-continued work.

At the beginning of the past year the right honourable gentleman suffered from a temporary renal affection, with much attendant disorder of health. The heavy pressure of public duties might alone have prostrated a stronger constitution, but when to these is added the grievous domestic trial involved in the loss of the *Captain*, his condition is very fully explained. His present state is one imperatively demanding repose and freedom from all the petty vexations which have been too frequent at the Admiralty. His medical attendant, Mr. Robert Ellis, has, we understand, assigned a period of three months as essential for the restoration of health. An over-ardent zeal in the public service and an insatiable appetite for brain-work cannot be indulged in for long without paying the penalty of deteriorated and enfeebled health in such a constitution as that of Mr. Childers.

SMALL-POX HOSPITALS.

WE are inclined to agree with the *Pall Mall Gazette* that the concentration of numerous cases of small-pox on any site, and particularly on the site at Hampstead, is a great mistake. More than once we have opposed the erection of enormous buildings for the treatment of contagious fevers. If the Asylum Board had ordered the construction of a series of movable iron wards, they would have conferred a great boon upon the poor, and would have relieved the guardians of an overwhelming difficulty. It is all very well for the managers to urge upon guardians to make some immediate provision for their own cases, but in effect it is very difficult to do so. The workhouses are full. The poor localities are densely crowded, and the rich object to have a small-pox hospital next door. It is a real cruelty and danger to carry the patients three or four miles away from their friends and relatives, and, with a vast amount of other work on hand, it is not surprising that the guardians put the whole responsibility on the authority which was brought into existence in order to bear it. The managers would have done far better to provide such temporary wards as might have been set up in any vacant space. They would thus have confined the contagion within the limits of the district. They would have made the isolation much easier, and they would have met the difficulty at half the cost of permanent buildings. We believe that the managers have also made a great mistake in placing fever and small-pox hospitals on the same site. The tendency of convalescents from fever to take eruptive diseases, and that of small-pox patients to take fever, is so strong and so fatal, that it may be regarded as impossible to prevent the spread of contagion under such circumstances. This objection would have also been overcome by means of temporary hospital wards which could be moved from place to place.

THE NEW BATHS AT UNIVERSITY COLLEGE HOSPITAL.

SEVERAL of the public City companies have just contributed to the fund which is being raised to defray the cost of the new baths at University College Hospital. The Fishmongers' Company has given the very handsome donation of one hundred guineas, the Clothworkers' ten, and the Grocers' ten guineas to this very deserving object, and only about £100 remains to be subscribed. A contract for the immediate execution of the whole work connected with the baths, for the sum of £1335, has been undertaken by Messrs. Jeakes, the well-known engineers of Great Russell-street. We may therefore hope soon to see the introduction of an efficient service of medicinal baths, which we have strongly urged as a most necessary addition to existing hospital appliances, accomplished at one at least of our large London hospitals, when no doubt the example set will be generally followed.

SCURVY.

IT is satisfactory to know that the operation of the Duke of Richmond's Act appears, with good show of proof, to have caused a persistent diminution in the number of cases of scurvy occurring in the British mercantile marine. The Seamen's Hospital at Greenwich has, in its former home in the *Dreadnought* hospital-ship, practically monopolised this malady in the metropolis, and has always, indeed, shown larger statistics of scurvy than all the other hospitals of the United Kingdom, so that the annual returns at this institution may be fairly taken as representing any change on this score for better or worse in our sea-going ships. Mr. Harry Leach has furnished us with the following statement, and informs us that in the statistics of the past year all cases of incipient scurvy, complicated or uncomplicated with dysentery, venereal, or other diseases, are included. We think that the figures are eminently satisfactory.

	British.	Foreign.	Total.
In 1865	101	1	102
„ 1866	96	5	101
„ 1867	90	4	94
„ 1868	64	10	74
„ 1869	31	9	40
„ 1870	30	21	51

The Duke of Richmond's Act came into operation on the 1st of January, 1868.

HEALTH OF DUBLIN.

FROM the Report of the Registrar-General for Ireland, for the quarter ending December 31st last, we find that the births registered in Dublin during that period amounted to 2014, being equal to an annual ratio of 1 in 39, or 26 in every 1000 of the population; and the deaths to 1970, affording an annual ratio of 1 in 40, or 25 in every 1000. The principal causes of death were as follows:—Bronchitis, 292 deaths; phthisis, 203; scarlet fever, 177; convulsions, 129; fever, 92; diarrhœa, 84; disease of the heart, 68; mesenteric disease, 36; hydrocephalus, 30; cancer, 29;

croup, 22; measles, 9; whooping-cough, 7; diphtheria, 6; aneurism, 5. 54 accidental deaths were registered—namely, 19 from fractures and contusions, 1 from wounds, 18 from burns or scalds, 10 from drowning, 4 from suffocation, and 2 instances in which the nature of the accident was unspecified.

THE PATHOLOGICAL SOCIETY.

THE chair was occupied by Mr. Hilton, F.R.S., the new president, for the first time on Tuesday night. He described himself as a very undeserving member. At the time the Society was first established he was closely engaged in pathological research, and he confessed that the proceedings of the Society were not altogether such as to encourage his zeal. A species of spurious egotism led him, therefore, to be less and less frequent in attendance at the meetings of the Society. But he confessed that things were altogether changed by the rapid advances which pathology had made, and one of the greatest pleasures to him would be, whilst presiding over the Society, to more thoroughly learn for himself the pathological anatomy of to-day.

A GOOD EXAMPLE.

AT the last meeting of the Guardians of St. George's Union, Hanover-square, Dr. Bloxam attended and respectfully but firmly declared that he considered his salary to be insufficient. The guardians proposed that he should undertake the whole of the duties which had been previously done by two medical men with assistance. There were upwards of 1200 cases to be attended at their own homes at any hour of the day or night; and in the workhouse 165 beds, distributed through 17 different wards, to attend to.

The guardians proposed a salary of £210 a year; but Dr. Bloxam considered the sum of £250, exclusive of midwifery fees, the lowest salary that could be fixed for the adequate performance of the duties. The guardians adjourned the question for a week.

PUBLIC VACCINATION AND THE EPIDEMIC.

No question is more important at this moment than the working of our system of public vaccination, by a very few public officers, at a very few public vaccination stations. It is estimated that the cost of the present epidemic to the public, through the Asylums Board alone, will be £20,000. In a mere pecuniary point of view the vaccination question becomes important. As a procedure of extreme simplicity for the stamping out of a most horrible epidemic, it is difficult to do justice to it, either in public arrangements or scientific statements. We shall not prejudge the state of public vaccination. We mean to ascertain, through our own Commissioners, the actual working of the Vaccination Act, and to-day we publish the account of their first inquiries. In Islington, indeed, the part of the metropolis in which our inquiries have commenced, the state of public vaccination is monstrously unsatisfactory, as will be seen by the report of our commissioners in another column. This large district, including 200,000 people, is supposed to be vaccinated by four public vaccinators, at four stations, at none of which, excepting the Privy Council station at which twelve cases were done, in any one given day were a dozen children vaccinated. At one there was not a child to vaccinate from. At another only one was really available for this purpose. At none of them were there more children applying for vaccination than may be seen weekly in the surgeries of private practitioners of the district who vaccinate gratuitously. In plain terms, either the bulk of the vaccination is done by private practitioners, not amenable to the Privy Council, or it is not done at all. The large amount of small-pox in Islington consists with the very unsatisfactory state of the public arrangements. There is only one inspector for the whole of the district. As we have said, we shall not prejudge the general arrangements of the metropolis, which, however, we have never approved. Our Commissioners will continue their observations. If we find that the state of matters in Islington is exceptional, we shall only be too glad to admit the fact. If not, perhaps our suggestions may meet with more attention at the hands of the Privy Council than they have hitherto received.

THE COST OF RAILWAY ACCIDENTS.

IT is some small satisfaction to know that railway companies do not maim, mutilate, and kill their passengers gratuitously. During the past year a total sum of £333,715 was expended by railway companies in the United Kingdom as compensation for personal injury,—of which the Great Northern paid £28,000; the Great Western, £20,000; the Lancashire and Yorkshire, £19,380; the Midland, £24,988; the London and North Western, £73,804; and the London, Brighton, and South Coast Railway, £47,457. It would be interesting, but impossible, to collect particulars as to the injuries inflicted upon their victims, whose hurts are supposed to have been healed by the application of more than a quarter of a million of money.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

As the probabilities are great of Mr. James F. West's removal to London, the vacancy which would result at the Queen's Hospital has been canvassed with great activity for the past fortnight. The chief candidates are Mr. C. J. Bracey and Mr. Lawson Tait. Mr. Bracey's candidature is exciting some surprise, seeing that he has just allowed a vacancy at the General Hospital to pass which he might readily have secured. The contest will be a tough one, but Mr. Bracey's seniority and the good work he has already done at the Children's Hospital will probably secure him the position.

THE ISLINGTONIAN ESTIMATE OF MUSIC, PHYSIC, AND DIVINITY.

THE Islington guardians have a school at Holloway containing from 250 to 300 children. The chaplain attends twice a week and conducts a service on Sunday; his salary is £50 a year. The bandmaster attends once a week for three hours, and gets a similar amount. Whilst the poor medical officer, who attends every day, and has to keep an elaborate set of books and dispense his own medicines, is thought sufficiently well paid by a salary of £40 a year; he has frequently thirty or forty children under special treatment; he is responsible for the general sanitary arrangements of the school, and is required to vaccinate without the usual fees.

HANWELL ASYLUM.

WE learn that the report to the magistrates on the Hanwell Asylum, which will be printed and published in due course, adverts at some length to the case of a patient who had sustained a fracture of the ribs "under somewhat peculiar circumstances," which led to a correspondence between the Commissioners in Lunacy and the Committee. We shall look forward with interest to both the circumstances and the correspondence. The report states that the asylum contained 1785 inmates on the last day of 1870, an increase of 87 upon the last day of 1869. There were 392 admissions in 1870; and 48 males and 69 females were discharged recovered.

THE Salisbury Medical Society commenced its third year at a meeting held on the 5th instant at the Committee Room of the Salisbury Infirmary. There was a good attendance of members, some from long distances. The chair was taken by Dr. FOX, of Broughton, President of the Society for the current year. A very able and practical paper was read by Mr. W. Martin Coates, of Salisbury, "On the Cure of Bronchocele by Injections of Tincture of Iodine"—a treatment which has met with much success in his hands. Mr. Coates also detailed a case of successful operation for vesico-vaginal fistula, and introduced a number of patients from the wards of the Infirmary on whom iridectomy had been performed with much benefit.

THOMAS STONE, ESQ., F.R.C.S., for thirty-five years resident medical officer to Christ's Hospital, has, in acknowledgment of his most assiduous, able, and successful discharge of duty, been presented with a large and elegantly chased silver waiter, bearing a suitable inscription from the pen of the head-master, and accompanied with a purse of 100 guineas. The testimonial was less the result of a few large subscriptions than of a great number of small ones, on the part of the "Old Blues," who will ever keep in fond recollection their genial and judicious friend.

THE next meeting of the Association of Medical Officers of Health will be held at 7.30 P.M. on Saturday, Jan. 21st, at the Scottish Corporation Hall, Crane-court, Fleet-street, when Dr. Robert Barnes will bring forward for discussion the question: "How far is the present prevalence of Small-pox to be attributed to the plan recently introduced of limiting the number of Public Vaccinators?" Dr. T. Spencer Cobbold, F.R.S., F.L.S., will read a paper "On Entozoa in relation to the Public Health, especially as regards Sewage Irrigation," illustrated by drawings and specimens.

FROM the *Darmstädter Zeitung*, of the 17th inst., we find that his Royal Highness the Grand Duke, by a resolution of the 12th inst., has been pleased to approve, from the 1st of the month and onwards, the promotion of the Alice Hospital to the rank of State Reserve Hospital, and the appointment, as acting physicians to the same, of the following gentlemen: Dr. Charles Mayo, as superintending staff physician; Drs. John C. Galton and Henry Rundle, as ordinary staff physicians; and Dr. Herbert W. Page, as assistant physician.

THE recent cold weather has had its natural effect in raising the mortality at advanced ages of life in London. During the three weeks ending November 12th, when the mean temperature was 44 degrees, the proportion of deaths at ages of forty and upwards was 34 per cent. of the total mortality; the mean temperature of the last three weeks was 30 degrees, and the proportion of deaths at the above-mentioned ages was 43 per cent.

IN reference to a claim by Mr. Prowse, medical officer of the Amersham Union, upon the Guardians of that union for a fee of 10*s.* 6*d.* for attending Petty Sessions to give evidence in support of a vaccination prosecution, the Poor-law Board has been asked for a ruling whether or not it is part of a medical officer's duty to attend in such cases, and if not, whether the guardians would be authorised to pay him his fee for so doing.

THE office of London physician to St. Anne's Royal Corporation has become vacant by the death of Dr. Mayo, F.R.S. The appointment is in the gift of the whole body of subscribers.

ANOTHER hospital, we understand, will shortly be erected in Constantinople, for which £7000 has already been subscribed, including a donation of £1000 from the Sultan. It will embrace all the most modern improvements in structure, ventilation, &c., and its medical officers will be selected from both the native and foreign practitioners in that city.

ON Monday last, at an entertainment given to the inmates of the workhouse of St. John's, Westminster, by the Lady Visitors, a testimonial was presented to Dr. J. Orme Dudfield by the poor and their friends in acknowledgment of the uniform kindness and urbanity with which he had discharged his duties as medical officer for a period of nine years.

"DR." BURGESS, described as a "dispenser of medicine," was fined £5 last week at Marlborough-street for having improperly taken the title of "doctor." The *soi-disant* "Dr." visited and prescribed for a child, who died in a day or two. It is pleasing to learn that the Medical Act is not wholly inoperative.

THE last number of *Nature*, as well as that issued for the current week, contain articles upon the new St. Thomas's Hospital which will afford a good description of that very handsome structure, with a plan representing the arrangement and position of the different blocks.

WE have reason to believe that Dr. Gull, the newly elected president of the Clinical Society, will deliver an address to the members on taking the chair at the next meeting, which will be held on the 27th inst. in Berners-street.

THE seventh Quarterly Meeting of the Medico-Psychological Association (for scientific discussion) will be held in the rooms of the Medical Society, George-street, Hanover-square, on Tuesday, January 31st, at 8 o'clock.

WE regret to learn that H.R.H. the Duke of Cambridge is for the present prevented from attending to his official duties owing to an attack of gout.

AN eligible site has been obtained for the erection of a cottage hospital at Tenby, and it is understood that the building will soon be proceeded with.

MR. JABEZ HOGG has been elected to the office of Surgeon to the Royal Westminster Ophthalmic Hospital.

THE WAR.

INTERNATIONAL PHILANTHROPY.

AN enormous sum of money has been subscribed by this country for the French and German wounded, and our own charitable institutions have suffered in consequence. By this time we presume the money has been well-nigh expended. If it were right to put our hand to the work at all, we ought not now to be looking back. People, however, have begun to ask whether the aid we have given was right in principle, or even expedient in policy. We have gained but little gratitude from either the French or the German Government, for all the money, zeal, and labour that have been bestowed upon their wounded; but we have done as much as in us lay to protract the struggle, just as schoolboys lengthen a game by occasionally allowing the "odd" boy to play on both sides. Let us confess at once that we regard the system of International Aid Societies as altogether wrong in principle; and in order to prove this

we have only to follow it out in practice to a logical conclusion. If the principle of affording succour to a portion of the wounded on both sides be a correct one, it follows that it would be equally correct to apply it to all the wounded, and to do this would be to change the very aspect of warfare itself. To a good and humane mind there seems something horrible, perhaps, in thus standing aside; but let us be sure that we are not binding up the wounds of a few soldiers in order that the many may be left free to inflict others. International aid to the wounded is wrong in principle, and cruel in practice; and we venture to prophesy that it will cease to be the method by which England will in future times strive to express her sympathy with suffering humanity.

ALLEGED BARBARITIES BY THE FRENCH.

Count Bismarck, in his recent circular in answer to the charges of alleged cruelties brought by Count de Chandordy, quotes the evidence of a Swiss surgeon, Dr. Buckhard, dated Pinseaux, Dec. 18th, 1870. "The Geneva Convention has in many instances been infringed during the fighting in the forest of Orleans. On the 30th November I saw a French military surgeon, of whom not only the French prisoners asserted, but who himself openly acknowledged, that he had killed many Prussian prisoners with his revolver. Numerous wounded relate that many Francstireurs, when retreating, pulled Geneva 'brassards' from their pockets." A correspondent of the *Evening Standard*, however, asks who Count Bismarck's solitary witness is? If he is the Dr. Buckhard who was formerly connected with the German Hospital at Dalston, and subsequently removed to Paris, the information "would go a great way to establish the credibility of the witness who accuses a French doctor of shooting his patients." We confess we cannot believe that anyone, more especially a medical man, would be so lost to all sense of shame and humanity as to murder defenceless and wounded men who were looking to him for succour.

THE FIRING ON HOSPITALS.

There can be no doubt that several hospitals have been fired upon during the bombardment of Paris — Val de Grâce, the Salpêtrière, the Pitié, the Enfans Malades, and some hospital huts, for example. The medical officers protested, and General Trochu brought the subject to the notice of Count Moltke, who declared that the firing was accidental and owing to the fog, and should be avoided in future. This was no doubt the fact, for we cannot believe that anyone would be guilty of the wanton cruelty of firing on hospitals. The French, by the way, adopted a very shrewd mode of appealing to the feelings of their invaders. They forwarded an intimation that Prussian wounded and prisoners would be located in the hospitals that had been fired upon. The commandant of Longwy, according to the *Echo du Nord*, had received orders to confine some Prussian prisoners in the hospital wards, in order that they might share the fate and dangers of the sick and wounded patients during the threatened siege.

"MAN AND BEAST" IN PARIS.

According to *The Times* correspondent, the number of horses in Paris is visibly diminishing, and the survivors are wretched objects, painful to behold. There is no forage; and men and horses share the common fare—bread.

THE MORTALITY IN PARIS.

The returns for the first week in 1871 show a grievous increase in the number of deaths, being 3680, as against 3280 in the previous return. These figures do not include the military population. Small-pox (which is on the increase), bronchitis, pneumonia, and diarrhœa make up the principal diseases. The reports of the wounded from the hospital establishments have somewhat improved. It is stated that the number of those who have become insane since the war is very great; the asylums are quite full.

We are compelled to defer noticing this week the information forwarded us by a correspondent near St. Cloud with the 1st Silesian Jägers, 3rd army, 9th division, 5th Army Corps.

DR. BRIDGES' REPORT ON SMALL-POX.

The Times has published a long report on the Epidemic of Small-pox in London, by Dr. J. H. Bridges, Poor-law Inspector. In tracing the early history of the epidemic, the inspector points out the very great value which would have accrued from a systematic registration of contagious diseases carried out by the parochial medical officers under the supervision of the Poor-law administration. It is not too much to say that at least three weeks would have been thus gained for preventive measures. The number of patients under treatment at their own homes, or in the workhouses, had risen from 213 on the 5th of November, to 626 on the 7th of January, 1871; whilst the total in hospital and under the officers of the poor were from 600 to 900 in the same interval. These are exclusively recipients of Poor-law relief. Of small-pox in the classes of pauperism there are no returns.

Dr. Bridges defends the additional buildings on the Hampstead site, which he says are placed at a greater distance from the public thoroughfare than those previously erected, the space between this latter and the nearest house in the neighbourhood being already such as to preclude any possible danger of contagion. Dr. Bridges states that it is of the greatest importance that those unions and parishes which are the principal seats of the disease should co-operate with the Metropolitan Asylums Board, which has at present accommodation for only 200 patients. The Board expect, however, to be able to open in February the hospitals at Stockwell and Homerton, each with 100 beds; and have authority to provide further temporary accommodation for 100 patients.

Dr. Bridges has certainly not exaggerated the danger of admitting small-pox cases to the workhouse. He states that credit is due to the medical officers and the authorities generally for the fact that in so very few instances has there been even a suspicion, and that a doubtful one, that the disease may have spread from the small-pox ward to the other inmates of the workhouse. But the inconvenience and the difficulties caused have been very great. If we are not mistaken, a man was admitted to the Holborn workhouse from the casual ward. The male attendant on him took the disease, and five other cases have since occurred in other parts of the establishment. This is scarcely to be wondered at, seeing that nowhere in the metropolis is it possible to send infected linen to a separate laundry, and that in this workhouse it goes to the common washtub.

Dr. Bridges concludes his report by stating that the mortality of vaccinated patients is only 4 per cent., that of the unvaccinated being 32 per cent. We observe that local action has been taken by most of the metropolitan boards of guardians, and that every day is adding to their number.

PRESERVATION OF FOOD.—At the meeting of the Society of Arts on Wednesday, Mr. Richard Jones read a paper on the question of the "Preservation of Animal Food," and described his mode of cooking meat so as to preserve it for an indefinite length of time. By this process the food is placed in tins, and the tins set in a water or chloride-of-calcium bath, and exposed to heat until the meat within is effectually cooked. During this proceeding the air and moisture within the tins are removed by connexion of each tin with a vacuum. Some specimens of food that had been preserved for four months were placed before the Society, and were considered a great success. It would, in fact, have been difficult to discover any difference between them and similar foods recently cooked in the ordinary way.

Correspondence.

"Audi alteram partem."

OUT-PATIENT HOSPITAL REFORM.

To the Editor of THE LANCET.

SIR,—In your number for October 15th last, there is an interesting letter from Dr. Meadows, referring to the work of the Committee on Out-patient Hospital Reform. The labour devoted to such work and the incidental expenses are greater than many may suppose. Labour can be given gratuitously, and it has been liberally bestowed in this instance, but pecuniary expenses must be met by funds.

The meeting over which I had the honour to preside, when the committee was appointed, was large, and I am sure that it is only needful to make it known, through the medium of the medical journals, that about £30 are required to liquidate the needful outlay, in regard to printing and otherwise, when an immediate response will be the result.

Dr. Meadows informs me that 5s. from everyone present on that occasion would amply make up what is required; and I venture to hope that he and the other gentlemen of the Committee will be speedily relieved from all pecuniary responsibility. Donations should be sent to the Treasurer, Dr. Meadows, 27, George-street, Hanover-square.

I remain, Sir, most faithfully yours,

WM. FERGUSSON.

George-street, Hanover-square, Jan. 11th, 1871.

AFFECTION OF THE INTESTINES IN INDIAN FEVERS.

To the Editor of THE LANCET.

SIR,—The perusal of Professor Rolleston's paper in your last issue suggests to me a few observations respecting the affection of the intestines in various forms of fever known in Lower Bengal under the names of ardent, remittent, or congestive. Twining said, in 1835, that gastro-enteritis frequently occurs in remittent fever, and that in congestive fever, in rare instances, superficial ulceration of the mucous membrane of the small intestines has been found, and that such cases may have some resemblance to European typhus. Sir Ranald Martin says that in very severe remittent fever, or in protracted cases of it, redness, ecchymosis, or even ulceration, will extend to the surface of the large and small intestines.

In the year 1848 several fatal cases of fever occurred during the hot season in the European General Hospital at Calcutta. The late Dr. T. M. Lee was present with me at the post-mortem examination of them. He had just come from Edinburgh, where he had been studying typhoid fever, and on observing the appearances in these cases he at once said they were those of the *dothien enteria* to which he had been accustomed. I have rough notes of four of these cases. In all of them the mucous membrane of the small and large intestines was more or less red and congested in patches, and in two of them it is expressly said that there was elevation of Peyer's patches above and at the ileo-cæcal valve, which would evidently have run into ulceration.

These cases were considered to be acute remittent fever. They occurred in Europeans of the ages of nineteen, twenty-two, twenty-five, and forty-two. All four terminated within two days of their admission into hospital. Of the three who could give any account of themselves, two had been ill for five or six days before admission, and a third had been ill for three days. In some of them diarrhœa was a prominent symptom, and no rash was observed (not that it was searched for). The course of all these cases was much more acute than that of enteric or typhoid fever.

I am not going to enter into any discussion respecting the differences between the ardent, the remittent, and the congestive fevers of Calcutta, as they used to be named, still less concerning the complicated subject of gaol typhus, or typhoid, or of the troublesome epidemic fevers which have of late years prevailed in Lower Bengal, in parts of the Punjab, and near Darwur. My object has merely been to express the opinion that affections of Peyer's glands may take place in Bengal fevers, without their being necessarily cases of typhoid.

I am, Sir, your obedient servant,

Curzon-street, Jan. 12th, 1871. JOHN MACPHERSON, M.D.

THE BRITISH MEDICAL ASSOCIATION AND THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—I am much pleased to find that a member of the British Medical Association of Dr. Anstie's standing in the profession has felt himself called upon to protest against the doings of the Reform Committee of the Association. As a member of the Association I fully coincide with his remarks.

I may here mention, that in speaking to a member of Parliament a few weeks since about our new LANCET Bill, he asked me if the corporations were to be represented at the Council? I said "Yes." His reply was, "If so, it is my opinion that such a Bill would not produce that reform which is hoped for by the profession at large." I then mentioned my views as follows:—1st. To constitute a Council of twelve members elected by the whole profession (registered). 2nd. No man to become a candidate for the Council who holds the position of lecturer or professor at any of our licensing colleges or universities. 3rd. The Council to be *de facto et de jure* the ruling power in the profession; that they appoint the best examiners for the United Kingdom that can be found, and that their examinations be the final test for registration.

I would finally propose that the present colleges not having medical schools attached should at once institute such schools, and appoint well-paid professors to the different chairs, so that the professors' whole time should be given to teaching. Thus, taking London for example, we should have four great public schools—namely, the University of London, the College of Physicians, the College of Surgeons, and the Hall. Where a man had studied there let him take out his diploma after he had passed the Council's examinations for registration; so that one and all the present diplomas would be a proof to the public that the practitioner had been educated at such a college or university, and also that he had passed the State examinations, and those of his own college too. Such a plan would produce better teachers and better practitioners, and each licensing body would still continue in healthy competition for candidates.

I am, Sir, your obedient servant,

W. MILSTED HARMER, M.R.C.P. Edin.

Hawkhurst, Jan. 17th, 1871.

THE PROFESSION IN LINCOLN.

To the Editor of THE LANCET.

SIR,—Although practising as a physician in Lincoln, I was not quite aware that professional remuneration in general practice had fallen to such a low ebb, till I read the letter of "Cacouna" in your last week's impression. Who is in fault here? I must say, in justice to the inhabitants of Lincoln, that they are not altogether to be blamed, for I have found them rather liberal in their payment.

But if the state of things exists which your correspondent represents, I would strongly advise the medical gentlemen of the city to take counsel together, and remedy matters as quickly as possible. As the fees rest in a great measure with themselves, they have only to come to unity on the subject and all will be well. As to the club system, I may be wrong in my opinion, but I have always looked upon it as a mistake. At all events, the present extension of it has become an abuse, and acts most injuriously on the profession at large. If gentlemen would eschew clubs and graduate their fees so as to meet the means of all classes of the community, I am sure it would be very much to their advantage. It is the duty of every medical man to be civil and courteous to even the poorest and most humble of his patients, but when a man condescends to sit down with club

members, and, from interested motives, regale them with bread-and-cheese and beer, I am sorry to say that I think he sadly forgets the respect due to himself and to his honourable profession.

I am, Sir, your obedient servant,

Lincoln, Jan. 16th, 1871. WILLIAM O'NEILL, M.D.

IMPROVED BLOW-PIPE.

To the Editor of THE LANCET.

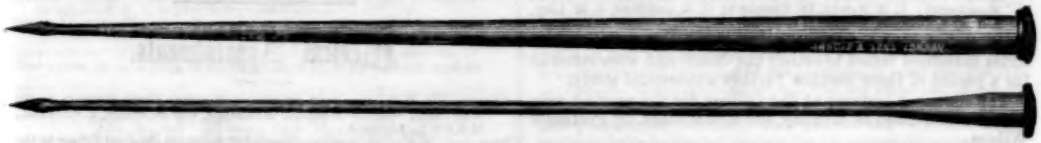
SIR,—I beg to forward you a specimen of an improved blow-pipe, which possesses many advantages over the ordinary dissection one. It consists of a blow-pipe with the addition of a steel stilette, at the end of which is a trocar point. The blow-pipe now in use is continually getting blocked up, in consequence of the necessity of having to thrust it through animal tissues, and it thus becomes for the time useless to the student. It is obvious that the specimen I forward you overcomes this difficulty. For instance, in inflating the abdomen, the blow-pipe, by means of the trocar-point, which projects beyond the end of the blow-pipe, may be thrust through the umbilicus, and the stilette having been withdrawn, there will be found no difficulty in blowing in the air; and its egress is easily prevented by securing the hole, which is necessarily very small. The blow-pipe may also be used as a trocar and canula, in the many small operations in which that instrument is used.

The instrument was made for me by Messrs. Arnold and Sons, of 35 and 36, West Smithfield.

I am, Sir, your obedient servant,

H. A. ALFORD NICHOLLS.

St. Bartholomew's Hospital, Jan. 4th, 1871.



The upper illustration shows the blowpipe and stilette ready for use. The lower illustration represents the stilette, with trocar point, which fits into the blow-pipe.

Obituary.

SIR JOHN FIFE, KNT., F.R.C.S.

OUT of London there were few surgeons who enjoyed a wider reputation than Sir John Fife, of Newcastle-on-Tyne, who died on Monday, the 16th inst., at his residence in Reedsmouth, in the seventy-sixth year of his age. Sir John was not only a brilliant surgeon, but one of the leading public characters of the North of England. He was instrumental in procuring the Municipal Reform Act of 1835, and was elected to the council at the first election under that Act. He was made an alderman in 1835, and continued one until he saw fit to resign the office in 1862. During this long period, and in the eventful years immediately preceding, he took an active part in all local and general politics. He was a leader, if not the leader, of the Liberals in that part of England at the time of the passing of Lord Grey's Reform Bill, and gained great influence by his share in the agitation by which that measure was passed into law. Sir John Fife was Mayor of Newcastle on two occasions. The first was in the years 1838-9. It was in 1839 that the great Chartist riots occurred, and it was for his personal bravery and decision in dealing with the rioters—in which duty, by the way, he was assisted by Dr. Headlam, then the leading physician of Newcastle,—that her Majesty conferred on him the order of knighthood. It would have been a pity if Sir John had not been knighted, for, in truth, he was a knight by nature. He was neat and quiet in person, very courteous and gallant in manners, active in the discharge of duty—ready for anything, from speaking at a public meeting to dispersing chartists or operating for stone, and doing all in an elegant and knightly style. He was not only a Knight of the Order of Knights Bachelors, but also a Knight of the Order of St. John of Jerusalem. He was a Whig in politics, a devoted member of the Church of England, and up to a very recent period the most conspicuous public man in Newcastle-on-Tyne, as well as its leading surgeon, and, until a very few years ago, did active work punctually as senior surgeon of the infirmary.

As a surgeon Sir John will long be remembered for a certain dash and boldness of operation, and for his imperturbable self-confidence under emergencies. His name was a sort of charm in all surgical cases in Newcastle and its neighbourhood. He was a successful lithotomist, and had a special reputation for skill in ophthalmic cases. He did not contribute materially to surgical literature.

It is often discussed whether a medical man can be distinguished both in his profession and in public life. Some men can accomplish this double reputation; and there are few more creditable instances than Sir John Fife, the late Dr. Headlam of Newcastle, and the late Dr. Brown of Sunderland. Sir John's energy was rare, and doubtless based on an exceptionally good constitution, which only gave way about a year or two ago, under suffering occasioned by a large stone in the bladder, for which he was operated on by Sir William Fergusson. Our Newcastle correspondent at the time gave some account of this operation. It is remarkable that Sir John should have needed the operation which he had so often brilliantly performed. Sir John suffered severely at the time, and after, but had recovered so far as to move about, and enjoy comparative health, until Sunday last, when he was seized with paralysis, of which he died on Monday. He was the eldest son of the late William Fife, surgeon, of Newcastle.

DR. THOMAS MAYO, F.R.S.

ONE of the last of the scholarly physicians of the old school has just been lost to the profession in Dr. Thomas Mayo, who died on the 13th inst. at Corsham, in Wilts. Descended from a highly respectable family which has contributed more than one distinguished name to the practice of medicine, Dr. Mayo was born in London in 1790; received his first education at Westminster School, and thereafter at Oxford, where he became a Fellow of Oriel College, and graduated as Doctor of Medicine in 1818. In 1819 he was made a Fellow of the Royal College of Physicians, of which he continued to be one of the most distinguished ornaments till 1857, when he was elected President in room of Dr. Paris, and held the post till 1862, when he was succeeded by Sir Thomas Watson. He was for many years physician to the Marylebone Infirmary, and carried on a consulting practice at once extensive and select. He was an indefatigable contributor to the literature of the profession, particularly in that shadow-land of medical inquiry—the relations of mind and brain. His best known works are entitled "Elements of the Pathology of the Mind," which was published in 1838, "Clinical Facts and Reflections" (1847), "Outlines of Medical Proof Revised" (1850), and a treatise on "Medical Testimony and Evidence in Cases of Lunacy" (1854).

MR. ROBERT SPEEDY.

WE regret to record the death of Mr. Robert Speedy, surgeon of the 46th Regt., at Winchester, on the 3rd inst., after a short illness. He was the eldest son of the late Dr. Speedy, of Dublin. Having entered the army in 1853, he served in the 1st West India Regt.; then on the staff at the Cape of Good Hope. He afterwards joined the 45th Regt., which he accompanied to India; and latterly the 44th Regt.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Court of Examiners on the 17th and 18th inst.:—

Henry Pigeon and John Sprod, Bristol; William C. Sparrow, Robert L. Sparrow, T. J. Hughes, William Murray, and R. A. K. Holmes, Dublin; Joseph O. Pires, Bombay; Henry Thompson, Hull and St. Bartholomew's; Arthur W. Bateman and Charles E. Alford, University College; F. E. Thurland, E. Jepson, C. G. Jones, C. Farmer, Edward J. Lloyd, Russell H. Monro, Frank A. Hall, and F. A. Owgan, St. Bartholomew's; W. G. Nash, J. B. Bunny, A. E. Kessan, A. P. Kingscombe, and John Clague, Guy's; R. Birch, H. P. Payne, H. B. Collins, James Powell, G. H. Le Mottée, C. M. Vowell, E. E. Morgan, and N. C. Collier, King's College; W. D. Bowkett, J. H. Mitcheson, and C. A. Fox, London Hospital; J. L. Hemming, St. George's; Walter Hallam, Sheffield; David Munro, Kingston, Canada; James M. Beamish, Cork; H. M. Aspinall, Manchester; C. H. Newby, St. Thomas's; G. A. Critchett, J. M. Ling, and W. E. Griffiths, Middlesex Hospital.

It is stated that thirty-eight out of the eighty-two candidates examined failed to satisfy the Court, and were referred for a period of three months' further anatomical study.

The course of lectures at the College for the present year will be commenced on Monday, the 30th instant, by Professor Wilson.

The Minutes of the quarterly meeting of the Council on the 12th instant have just been suspended in the hall of the College, and contain but little information beyond what has already appeared in this journal. Mr. Murdoch Kelburne King, of Hull, a Licentiate and Fellow of the College of Surgeons, Edinburgh, elected on the 3rd of November last, was admitted a Fellow *ad eundem* of the College. The report from the Court of Examiners was read and adopted, including a recommendation that, pending future arrangements, the preliminary examinations should be continued, and that the subjects thereof for this year should be the same as for the past year. Mr. William McCormac, of Grosvenor-street, a Fellow by examination of the Royal College of Surgeons in Ireland, was elected a Fellow *ad eundem*.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Jan. 12th:—

Cass, Stafford Thomas, St. George's-road.
Hollinshead, Francis, Selby Oak, near Birmingham.

ROYAL COLLEGE OF SURGEONS OF IRELAND. — At a meeting of the Court of Examiners held on the 10th and 11th inst., the following gentlemen passed their primary examinations in Anatomy, Physiology, and Materia Medica:

Henry Wharton Carpenter, John Clifford, Henry Thompson Cox, James Donovan, Wm. Robinson Evans, Christopher Fleming, Francis Hannan, Fitzjohn Irwin, Richard Johnston, O'Connell John Lawrenson, William Henry Oulton, Thomas Pegum, Geo. Aloysius Raverty, Godfrey Knight Sproule, John Mulville Thomson.

DR. HERMANN BEIGEL, who is now with the army of General Manteuffel, was decorated on the 4th inst. with the Order of the Iron Cross—an order which can only be gained by personal bravery on the field of battle.—*Pall Mall Gaz.*

THE Royal Hospital for Incurables, at Putney, has lately received from the treasurer the munificent donation of 400 chromolithographs of the best kind, all in handsome frames, for the decoration of the apartments occupied by patients.

LORD GEORGE HAMILTON, M.P. for Middlesex, will preside at the biennial dinner of the Great Northern Hospital in the spring. Gentlemen kindly intending to act as stewards are cordially invited by the committee to send their names at once to Mr. Reid, the secretary. A guinea dinner ticket covers all liability of a steward.

THE INTERNATIONAL CONGRESS OF 1871 IN VIENNA. —This will be the third of the series, the second having been held at Florence in 1869. The Committee had been appointed in the latter city, and has now chosen its officers. President: Professor Rokitansky. Vice-presidents: Professors Duchek and Sigmund. Secretaries: Drs. Benedikt and Schnitzler. The Committee will request the assistance of the medical corporations of Vienna, and at once begin the work of organisation.

BEQUESTS, DONATIONS, &c.—The Worshipful Company of Fishmongers have presented £100 to the Great Northern Hospital; the Worshipful Company of Drapers, £52 10s.; Wm. Loyd Jones, Esq., £50; Richard Spry, Esq., £31 10s.; J. Martin, Esq., £30; and Mrs. H. Mark, £10 10s. The Worshipful Company of Grocers have voted the donation of £100 to the funds of the National Hospital for Consumption and Diseases of the Chest, Ventnor, Isle of Wight. The concert lately given by the Tottenham House band, at St. James's Hall, in aid of the funds of University College Hospital, resulted in the sum of £153 being added to the funds of this charity. The Kent and Canterbury Hospital has received £500 under the will of Miss Dorsett. James Gleadall, Esq., has given £105 to the Royal London Ophthalmic Hospital, Moorfields. The Royal Infirmary, Aberdeen has received £50 under the will of Alexander Sutherland, Esq.

Medical Appointments.

ARCHER, Mr. E. G., has been appointed Resident House-Surgeon at the West Kent General Hospital, Maidstone, vice R. Argles, L.R.C.P.Ed., M.R.C.S.E., resigned.

DOW, J. C., M.B., C.M., has been appointed Assistant Medical Officer to the Towns Hospital, Glasgow, vice W. MacEwen, M.B., C.M., resigned.

GALLOWAY, J., M.B., C.M., has been appointed Medical Officer for the Edenfield District of the Haslingden Union, Lancashire.

GIBBINGS, A. T., M.R.C.S.E., has been appointed House-Surgeon, Apothecary, and Secretary to the Stamford, Rutland, and General Infirmary, vice J. Goodall, L.R.C.P.L., M.R.C.S.E.

HALKETT, L. J., L.R.C.P., M.R.C.S., has been appointed Medical Tutor at the University of Durham College of Medicine, Newcastle-upon-Tyne, vice Spencer, resigned.

HOLLINSHEAD, Mr. F., has been appointed Medical Officer for the Workhouse and the King's Norton District of the King's Norton Union, Worcestershire, vice Davies, resigned.

HUSBAND, H. A., M.B., C.M., has been appointed Local Medical Officer to the Holloway and North Islington Dispensary, vice R. P. Fouracre, M.R.C.S.E., resigned.

LEA, J. A., L.R.C.P., Assistant Demonstrator of Anatomy, has been appointed Resident Surgical Officer at Charing-cross Hospital.

MACKAY, A., M.B., C.M., has been appointed Medical Officer for the Crook District of the Auckland Union, Durham, vice W. M'Donnell Kelly, M.D., L.R.C.P.Ed., deceased.

MACKINTOSH, A., M.D., L.F.P. & S. Glas., L.M., has been appointed Medical Officer and Public Vaccinator for the North or No. 5 District of St. Germans Union, Cornwall, vice J. Kempthorne, L.R.C.P.L., F.R.C.S.E., resigned.

PEACOCK, A. L., M.R.C.S.E., has been appointed Medical Officer for District No. 9 of the Honiton Union, Devonshire.

PRITCHARD, J. C., L.R.C.P.Ed., M.R.C.S.Ed., has been appointed Medical Officer for District No. 2 of the Brixworth Union, Northamptonshire, vice W. Williams, M.R.C.S.E., resigned.

REED, Mr. R. B., has been appointed Medical Officer for the Walton Workhouse of the West Derby Union, Lancashire.

RUTHERFORD, T., L.F.P. & S. Glas., has been appointed Certifying Factory Surgeon for Bingley, Yorkshire, vice R. E. Ruffe, M.R.C.S.E., deceased.

STADDON, J. H., L.R.C.P.Ed., M.R.C.S.E., has been appointed Surgeon to the Suffolk Constabulary, vice F. Gull, M.R.C.S.E., resigned.

THOMPSON, W. W., M.R.C.S.E., has been appointed Surgeon to the Coastguard, Bognor, vice W. Thompson, M.D., F.R.C.S.E., deceased.

THOMSON, Mr. J., has been appointed Medical Officer for the Stourbridge Union Workhouse, vice J. Ireland, M.R.C.S.E., resigned.

THOMSON, Mr. J. M., of the University of Glasgow, has been recommended by a Special Committee for the Office of Assistant Demonstrator of Chemistry at King's College, London.

THORP, B., M.R.C.S.E., has been appointed Assistant Resident House-Surgeon at the South Dispensary, Liverpool, vice T. Fennell, M.R.C.S.E., resigned.

TOWNSEND, R. H., M.B., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Milltown-Malbay, Co. Clare, vice Wm. St. John Coleman, L.R.C.P.Ed., L.R.C.S.I., deceased.

WILKIN, T., L.K.Q.C.P.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Lisbellaw, Co. Fermanagh, vice Henry Betty, L.R.C.P.Ed., L.R.C.S.I., deceased.

WILSON, J. M., M.B., M.C., has been appointed Medical Officer and Public Vaccinator for District No. 4 of the North Witchford Union, Cambridgeshire, vice Barry, resigned.

WOLSELEY, C. B., M.B., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Dunfanaghy Dispensary District of the Dunfanaghy Union, Co. Donegal, vice F. Clarke, M.B., F.R.C.S.I., resigned.

Births, Marriages, and Deaths.

BIRTHS.

CLOVER.—On the 6th ult., at Cavendish-place, Cavendish-square, the wife of J. T. Clover, Esq., of a son.

GILL.—On the 16th inst., at Dover, the wife of John Beadnell Gill, M.D., of a daughter.

KIDD.—On the 18th inst., at Armagh, the wife of A. Napier Kidd, M.D., F.R.C.S., of a son.

MAJOR.—On the 16th inst., at High-street, Hungerford, Berks, the wife of Harry P. Major, M.D., of a son.

MILLER.—On the 14th inst., at St. Vincent-street, Glasgow, the wife of Hugh Miller, M.D., L.F.P. & S., of a daughter.
THOMPSON.—On the 15th inst., at Avenue House, Leamington, the wife of James Thompson, M.B., M.K.Q.C.P.I., of a daughter.

MARRIAGES.

CORT—DAVIES.—On the 12th inst., at the Holy Trinity Church, Southport, Arthur Armitstead Cort, Surgeon, of Blackburn, to Emma Ann Davies, only daughter of Edward Davies, Esq., of Gourton Hall, near Wrexham, North Wales.
SWINSON—GREATREX.—On the 12th inst., at St. Michael's Church, Rushall, Staffordshire, Thomas Spilsbury Swainson, Esq., of Mickleton, Gloucestershire, to Emily Caroline, eldest daughter of James F. Greatrex, Esq., of Walsall.—No Cards.

DEATHS.

BUCKLEY.—On the 13th inst., N. Buckley, M.D., M.R.C.S.E., of Townhead, Rochdale, aged 49.
DARBY.—On the 14th inst., at the Royal Infirmary, Manchester, John T. Darby, M.R.C.S.E., aged 25.
ELLERY.—On the 12th inst., at the Shrubbery, Axminster, Devon, Edith, daughter of H. J. Ellery, M.D., aged 7 weeks.
JONES.—On the 5th inst., W. T. Jones, L.R.C.P.Ed., L.F.P. & S. Glas., of Kentish-town.
ROSS.—On the 19th ult., T. Ross, M.R.C.S.E., of Wakefield, aged 68.
SWIFT.—On the 12th inst., H. Swift, M.R.C.S.E., of Fallowfield, aged 44.

Medical Diary of the Week.

Monday, Jan. 23.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Lettsomian Lectures: Mr. F. J. Gant. "On Excisional Surgery of the Joints." Lecture 2nd: The Hip and Ankle.

Tuesday, Jan. 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Foster, "On Nutrition of Animals."
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M. Rev. Dr. Steere, "On the Languages and Tribes of East Africa."—Dr. Eyschmacher, "On African Weapons and Implements."—"A Zulu Law Case." Communicated by Sir J. Lubbock, Bart.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. French, "On the Cause of the Post-mortem Muscular Contractions in Cholera."—Dr. Robert Lee: "Cases of Hysteria, with Sneezing."—Dr. Meryon: "Suggestions in support of a System of Rational Therapeutics."

Wednesday, Jan. 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Jan. 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Odling, "On Davy's Discoveries."

Friday, Jan. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Silver, "On the Use of Veratrum Viride in Rheumatism."—Mr. Teevan, "On Four Cases of Operation for unusually Large Calculi."—Dr. Handfield Jones: "Two Cases of Chorea, with Urinary Analysis;" and "On Puncture in Anasarca."—Dr. Broadbent, "On Paralysis of the Soft Palate, resembling Diphtheritic Paralysis."
ROYAL INSTITUTION.—9 P.M. Dr. Odling, "On recent Improvements in the Production of Chlorine."

Saturday, Jan. 28.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Rev. W. H. Channing: "Laws of Life revealed in History."

Notes, Short Comments, and Answers to Correspondents.

LADY DOCTORS.

UNDER the above heading a gushing correspondence has been going on in the columns of the *Echo*; and one of the participators in it, who signs herself "Helen Field," touchingly describes how, many years ago, an internal injury made her a miserable invalid, unable to move frequently, excepting from the bed to the sofa, and suffering indescribable agony. Doctor after doctor, most unwillingly on the patient's part, prescribed for her; but she only became worse. At length Providence made her determine to go to a lady doctor. "Oh! how different the treatment—a few questions delicately put, a simple prescription duly explained, every day rules, and all made easy to non-professional understanding." Since then the writer has been a different woman; and, in exchange for the benefit received, and because she had considerable difficulty in finding a duly qualified lady, she offers to send to any reader of the *Echo* the name and address of her benefactress. We should be very glad to see that the "duly qualified ladies" would set their faces like flints against such stuff as this. If Helen Field is stating the truth to the best of her knowledge, it seems probable that she had some uterine displacement, and that she either was unfortunate in not consulting any male doctor who detected it, or else that she misrepresented her sufferings. The "qualified lady" who relieved her would probably be the last to claim for her sex any monopoly of penetration with regard to the diseases peculiar to women, or any monopoly of delicacy in putting questions about them. Lady doctors, for some years to come, will incur considerable risk of being dragged into undesirable notoriety by the questionable laudation of persons of the Helen Field type; and, in the interests of their eventual success, they should discountenance everything of this description as decidedly as it has for years past been discountenanced by the higher class of practitioners of the other sex. Ephemeral reputation would be dearly purchased at the cost of submission to degrading advertisements.

F. R. M., (Guy's.)—The degree in question is not unlikely to be recognised under any Medical Act that is likely to be passed. But the uncertainty attaching to the recognition of any foreign degree should prevent our correspondent from depending upon that qualification for practice as a physician.

Dr. Maclean's letter is in type, and shall appear in our next number.

THE MEDICAL CLUB.

To the Editor of THE LANCET.

SIR,—In your notice of the Medical Club you state that the proposal to raise the amount of the annual subscriptions was "fully discussed and unanimously ratified at the meetings of the Club last summer." You have been misinformed. There were several meetings held during the year, and at all of them amendments to Dr. Lory Marsh's proposal were made. At the last meeting I was present, and, as representing the views of many country members, opposed the propositions then carried. I contend that Dr. Lory Marsh has broken faith with us, the original country members, and has acted unfairly towards those who have backed and supported him from the first. The scale of original entrance fees and subscriptions was Dr. Lory Marsh's own work. In the preliminary Committee, of which I was a member, that scale was considered too low; but Dr. L. Marsh was so sanguine of the support of the bulk of the profession that he declined to alter it. We all know his disappointment. With the exception of a few of his personal friends resident in London, the supporters and real founders of the Club were country members and naval and military officers.

The "elegant apartments" in Pall-mall offered such little inducement to members to frequent the Club that great efforts were made for its removal to its present *locale*; whilst to meet the increased outlay thereby incurred, Dr. Lory Marsh appealed to members to contribute to a guarantee fund for two years, with the distinct promise and undertaking that after that time the subscriptions should revert to their original amount. To what extent that appeal was responded to I do not know; but I do know that no sooner were the two years expired than Dr. Lory Marsh broke faith with those who had subscribed to it, and, repudiating all his express promises, brought forward his proposals of last year, whereby the subscription of the original country members is *trebled*, whilst that of town members is not even doubled. These are simple facts which I defy Dr. Lory Marsh to contradict.

I am, Sir, your obedient servant,
Abbotsbury, Newton Abbot, Jan. 10th, 1871. WM. ATKINSON.

*** We insert our correspondent's letter, because it reflects the views of a considerable number of the country members of the Medical Club. So far as it concerns Dr. Lory Marsh, we shall leave that gentleman to deal with it. But we should have liked our correspondent to indicate what other course than that adopted was possible, without sacrificing the Club altogether? We trust, however, that the new start the Club is about to take in its removal to Pall-mall will bring such support to it as will ensure its continuance, and facilitate some amicable arrangement between the Committee and the complaining members.—ED. L.

A Subscriber of Twenty Years' Standing.—There can be no doubt, we think, that a parturient woman is very susceptible to the action of animal poisons, especially that of scarlatina, and it would, therefore, be highly desirable to avoid exposing her to its action. We fully recognise the difficulties that exist at the present time in carrying this out; still it ought, as far as practicable, to be acted upon.

A "FAT" CHURCHYARD.

WE suspect that the experience of Mr. Holland, the Home Office Inspector of Burial Grounds, would in the main be found little in harmony with the hallowed associations which poets and moralists have always attached to the last resting-place of humanity. The movement which led to the closing of metropolitan burial grounds, and generally to the discouragement of intramural burials, was the result of disclosures not more shocking to one's sense of decent reverence for the dead, than repulsive to every consideration for the health of the living. A graveyard, whether in town or country, so overcrowded that fresh interments necessitate the disturbance of decaying remnants of mortality, cannot be regarded with any other feeling than that of disgust, and this, according to the evidence taken upon a recent inquiry by Mr. Holland, is the present condition of the churchyard of Stoke Damerel. It appears that in this churchyard of five acres, 80,000 bodies have been buried, mostly within the present century, and that in 1853 the future interment room was estimated at 9000, whereas 13,000 burials have actually taken place since then. In 1863, complaints were made by the officers of the Royal Military Hospital, which adjoins the churchyard, and the result was an Order in Council, closing some parts of the ground, and prohibiting interments in the remainder within a foot of previously existing graves. Alleged violations of this Order led to the inquiry which has just taken place, and the evidence goes to show that, so far from the foot distance rule having been observed, it was quite common to see coffins exposed when interments were being made, and that upon one occasion a skeleton with flesh still adhering to the bones dropped into a grave while the burial service was being read. It was further alleged that a disagreeable smell was at times perceptible in the place. Dr. Gallwey, of the Royal Military Hospital, who attended the inquiry, said he considered this churchyard "an enormous public evil," and intimated very plainly that he should use his best endeavours to get it shut up. We quite agree with the *Western Morning News* in thinking that sufficient cause was shown to justify the immediate closing of this churchyard, and we regret that the inspector did not feel it his duty so to recommend.

Juvenile, (Leicester.)—The guardians may, and often do, appoint as public vaccinators gentlemen who are not district or workhouse medical officers. There is nothing unprofessional in applying for the appointment.

Dr. Macleod's paper shall be published in our next impression.

ACCIDENTAL AND UNAVOIDABLE HEMORRHAGE.

To the Editor of THE LANCET.

SIR,—A short paper of mine in your journal of a year or so ago has called forth an interesting letter from Mr. Thompson. Either I expressed myself very badly, or that gentleman has somewhat mistaken the purport of my remarks. I spoke of accidental as distinguished from unavoidable hæmorrhage in the latter months of pregnancy; *not* of the hæmorrhages accompanying either condition, the patient being *in labour*. I began by saying, "the os uteri being unopened, and therefore a physical demonstration of the placenta impossible," &c., there would be no need for aid in the diagnosis if by actual contact the condition of things could be determined. I also said the hæmorrhage must not be severe, and the placenta must not be planted near the os uteri, or the blood would come away without percolating through the deposited fibrine.

Mr. Thompson brings forward a sample case to demonstrate his experience on this subject. But what is the nature of this case? It is one of labour with detachment of the placenta, the labour terminating favourably in four hours and a half. Consequently the blood was being forced from the uterus as discharged from the vessels! The hæmorrhage was severe! There was also fluid discharge! There is no mention of the situation of the placenta.

Mr. Thompson suggests that the discharge I have in my previous paper alluded to was squeezed from a clot, and was only a sign of *arrested hæmorrhage*. Has not Mr. Thompson seen cases in which the discharge of uncoagulable fluid (the presence of which in small quantities he allows) has in moderate quantities continued for weeks? And can he think that all this fluid has been squeezed from the clot deposited at a first hæmorrhage, and is only a sign of arrested bleeding; and, moreover, if *the discharge thus squeezed out is liquor sanguinis, my proposition is proved*. The case is one of unavoidable hæmorrhage, and not of placenta prævia.

Then as to the epistaxis. Why should the removal of the plug of coagula arrest the bleeding? May it not allow of the vessels contracting, and the cold air reaching the parts and assisting that operation? But according to Mr. Thompson's own showing, whilst the mass remains, the watery parts of the blood filtrate through it, and the discharge continues; entirely corroborating my opinion. That some of the discharge in accidental hæmorrhage is squeezed out of the clot in utero, I do not deny. But I maintain, shortly, that when (labour being absent) the discharge is slow and uncoagulable, the case is one of unavoidable hæmorrhage. But when the discharge is large and coagulable, we have to deal with placenta prævia.

It would be very interesting if the gentleman on whose case (reported in THE LANCET a week or two back) I ventured a diagnosis and prognosis bearing on this subject, would give us the result of his experience, and the benefit of judging of the value of my opinion.

Yours faithfully,

Hornsey-rise, Dec. 14th, 1870. EDWARD CALTHROP.

P. R., (Ashford.)—Thanks for the suggestion; but we fear that, even if acted upon at all, it would soon cease to be effectual. The attention of correspondents having been directed to the necessity of adopting some more definite signature than that of "Constant Reader" or "Inquirer," and the like, we may fairly leave the matter to them.

A Voice from the Ranks.—Our correspondent's important communication shall receive attention in our next.

Candidate.—He is usually required to reside within the district; but it is not necessary that he should either rent a house or pay rates.

Querist.—The fee should be put down to the firm accounts.

THE BENEFITS OF VACCINATION.

IN the Lincolnshire district of Pinchbeck we see an instance of what the Vaccination Act, when faithfully and energetically carried out, is capable of doing in the way of stamping-out small-pox. Out of a population of 3000, there has been only one death during the last thirty years from small-pox, and that was of a young man who had never been vaccinated. The district has for very many years been under the medical charge of Mr. T. Stiles, who has twice received the Government grant for efficient vaccination.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Notwithstanding the many recent improvements in the Medical Department of the Navy, discontent still prevails, and the service is so unpopular that candidates cannot be tempted to come forward. Many reasons are alleged for this, and have been embodied from time to time in your editorial remarks, and in the numerous letters which have appeared in your journal from naval correspondents. I believe that Mr. Childers is most anxious to adopt a liberal view with regard to medical officers; but he is, no doubt, trammeled by the class jealousy and prejudice which is at the bottom of all obstacles to improvements in the navy.

The main cause of discontent is, as has been often observed, the want of confidence in the Admiralty, which is justified by facts arising daily. When their Lordships want medical officers, Committees are appointed, the Medical Director-General is listened to, and certain improvements determined on, and guaranteed by her Majesty in Council. Able men are thus induced to enter, and officers already in the service to continue in it, on the faith of the realisation of the promised changes; but by-and-by these are evaded in an unworthy way, and the navy may, indeed, be considered a service of "expediency." If chaplains are wanted, the doctors go temporarily to the wall, and must yield up their cabins. If commanders grumble, the staff surgeons' right to an equality with them in the choice of cabins is at once abridged. If a new scheme of retirement comes out, the medical officers must yield to the pressure of the day; and although it has been a long-established principle that they, from the assistant-surgeon upwards, get a larger half-pay and retiring allowance than other officers, by the new scheme, recently adopted, paymasters, chaplains, naval instructors, and all executive officers are better off than the medicos. Outsiders cannot understand these repeated concessions and subsequent withdrawals of pecuniary and other advantages. The consequence is that the better class of medical students are taught to repose but little confidence in the promises of the Admiralty, and prefer to wait, however indefinitely, for admission into the army and Indian services.

The question should be in the present day immediately grappled with. The naval service, peculiar in its nature under the most favourable terms, should be made as attractive as it can be to the medical profession, and I beg you will allow me to make the following suggestions to that end.

1. It is, I believe, the general opinion that assistant-surgeons and surgeons are adequately paid; but the former officers are not placed in their proper position on entry. Why should not an educated physician and surgeon (both qualifications are now necessary) be placed in the same position exactly as the young chaplain, naval instructor, or lieutenant? And why should he not rise in rank in the same way? If the term "assistant" is the objection to the concession of an undoubted right, abolish it, and call him second surgeon. The title can in no way interfere with a due performance of his duties under his senior. I need not add that he should share in all the advantages his increased rank would give him.

2. Many talented and able men would enter the service if they saw a prospect in view of retirement at such an age that, when so retired, they might with advantage to themselves and their patients enter into private practice. I need not say to those conversant with the navy that twenty years is too long a servitude to accomplish this end. There are many brilliant exceptions; but, in general, officers who have served so long on full pay are unfit to compete with the civil practitioners of the day and of their own age. The consequence of the present system is, that the various ranks are clogged; the Director-General is at his wit's end to give employment to all, and discontent prevails to a large extent. If surgeons were allowed to retire after a shorter period of full-pay service on their existing half pay, without other claim on Government, they giving due notice of their intention to so retire, the navy would secure the services of officers anxious for their own sakes to benefit by the many opportunities it affords to scientific men to keep themselves conversant with the medical improvements of the day. Such officers might with advantage be enrolled in the militia, or be included in any future scheme of reserve which may be adopted for the defence of the country.

3. Many surgeons would embrace the proposal I have made; while, on the other hand, a considerable proportion would remain, and exert themselves to attain the *summos honores* with the more confidence seeing the list daily cleared of formidable competitors.

4. To hold out inducements to men anxious to reach the highest grades in the medical service, I maintain that the full, half, and retiring pay of staff surgeons, deputy inspectors, and inspectors-general should be materially increased, and that an equitable share of pensions should be allotted to those officers on the active as well as the retired lists; that the lists of the inspectors-general be considerably increased in number, and that these officers after a certain period of service in the rank be retired compulsorily. The widows' pensions should also undergo important modifications.

5. No corps can be efficient or command the respect of its own officers or of others when its chief is not placed in a proper position, and I maintain that such is so in the case of the head of the Naval Medical Department. We have never been so well represented before, and I say this without meaning in the least to reflect on the eminent men who have held the office of Medical Director-General. I believe that Dr. Armstrong commands the confidence and respect of the Admiralty, as he does of his own officers; but another Board may come into power, with a man at its head of more contracted mind than the present First Lord, and, with such, ability and anxiety to promote the best interests of the service may have no weight, and the medical chief be ignored, as some of his predecessors have been before him. I would say, therefore, that the holder of so important an office should always be in direct communication with the First Lord himself; that all medical promotions or appointments should rest solely and only with him; and that he should not only be paid while in office more in accordance with his high position, but that he should also be entitled to a retiring allowance of at least £1000 a year.

January, 1871. Your constant reader, A NAVAL MEDICAL OFFICER.

THE SPREAD OF CONTAGION.

AT the Clerkenwell Police Court, Mr. Cooke has inflicted fines, or, in default, imprisonment, upon a man and his wife who took in mangling from a laundress, and sent it back to her, at a time when they had in the house a child dying of small-pox. We have often commented on the way in which infection is spread by articles that have been washed or made up in houses in which disease was prevailing, and the decision of the magistrate is eminently just. But whenever we have a sanitary law, we think that the penal clauses about such matters should be supplemented by some provision for compensating those who are deprived of their daily bread. A woman who lives by mangling has unusual need to mangle at a time when the illness of her child has brought increased expense. Society, for its own protection, has a right to say, "You shall not mangle;" but it should surely add, "and I will make good to you the consequent loss of income." A mangle-woman cannot be expected to starve in order to secure the children of her customers from infection; and while society permits infection to be spread with impunity in a thousand ways, it seems like swallowing the camel to be over-solicitous to stop this little crack.

Dr. Lonsdale.—The word "imperfect" was intended to apply to our notice of the book, not to the book itself.

M.D., L.R.C.P.—Much depends on circumstances which are not stated in our correspondent's letter, such as the existence of any element of friendship, the inconvenience and loss occasioned by the journeys, &c. Two guineas a visit would be a very reasonable fee.

Dr. Lowe's (Lincoln) letter arrived too late for insertion this week.

FATAL STRANGULATION BY THE FUNIS.

To the Editor of THE LANCET.

SIR,—The following case is worthy of record:—I was called at 3 A.M. on November 23rd to a midwifery patient. On my arrival it was stated that the child had been born for a quarter of an hour, and had given at first but feeble signs of life. Unfortunately the nurse had not arrived, and the infant was left as born, a young woman who was present at the time being afraid to interfere. I found the child lying on its back, with a double coil of funis round the neck, no pulsation in the cord, and no sign of life. The uterus was contracted, and the placenta in the vagina. The cord was flaccid, and the finger could be passed easily between it and the neck. Artificial respiration was kept up for half an hour, but produced no effect, except a slight discharge of frothy, blood-stained mucus from the nose at the commencement.

On post-mortem examination ten hours after birth, the body presented the appearance of a fully-developed female infant, weighing 7 lb. 6 oz. There was no bruise or indentation round the neck; absence of lividity of face; no foreign body in the air-passages. The lungs were found fully inflated, and floated in water both when entire and when minutely subdivided. The weight of the lungs, heart, and thymus was 1750 grs.; of the lungs alone, 1033½ grs. The heart cavities were filled with dark fluid blood. The kidneys presented no trace of uric acid infarction. No sign of diseased organ discovered.

In this case strangulation by the funis was probably the cause of death. I attribute the absence of constriction, when I saw the case, to the shortening of the distance between the placental and the fœtal end of the funis on the separation of the placenta, and the diminution of funis volume on the subsequent cessation of circulation. The case is important from a medico-legal point of view, and bears out two conclusions which are laid down by Dr. Taylor (Medical Jurisprudence, 1865)—first, the occurrence of death from strangulation after birth, with thoroughly established respiration, from natural causes; second, the absence of any local post-mortem evidence of such strangulation.

I am, Sir, your obedient servant,

JOHN H. GALTON, M.D. Lond.

Thicket-road, Upper Norwood, Dec. 14th, 1870.

THE POOR-LAW MEDICAL ARRANGEMENTS IN BIRMINGHAM.

THE guardians of Birmingham have a vast amount of assurance. They have intimated to the Poor-law Board their refusal to adopt dispensaries, or alter in any way the present arrangements, which they say are of an unprecedentedly satisfactory character. We should think so indeed, as the following specimen, quoted from a local journal implies!

"A poor boy, who was suffering from kidney disease, applied lately for parish medical relief. His mother had tried unsuccessfully to get a ticket for one of the dispensaries, and only went to the parish as a last shift. This, indeed, is the usual way. The medical gentleman called, looked at the boy, saying, 'It's no use giving him any medicine,' and walked out of the room. Six days after that the doctor had never called again, but had left the boy to die like a dog."

We believe that these "unprecedentedly satisfactory" arrangements are a sham. We are of opinion that the medical officers of Birmingham cannot afford to do their duty as constant kindly attendants on the poor. That if they had the will, and were better paid, it would be physically impossible for any one medical officer to do justice to the poor of a district containing 50,000 persons; and the onus of the continuance of such a violation of the Consolidated Orders of the Poor-law Board now rests with Mr. Goschen. We can have no doubt whatever as to the course he will pursue. A properly instituted inquiry would, without doubt, prove to the public that the introduction of dispensaries would be both right and economical; and should the guardians still continue to resist, means are vested in the Poor-law Board for fixing the number of medical officers, the size of their districts, and the rate of remuneration.

Sanitas.—We think the Medical Report on Infant Mortality a little strong. Much, but not the whole, of infantile mortality is due to the causes named; but it should not be forgotten that infants are the first to feel the effects of all unhealthy influences, particularly sewer gas, impure air, dirt, overcrowding, &c.

Dr. Farquharson (Rugby) is thanked for his letter, which, however, was anticipated in the particular to which our correspondent refers.

TOWN DEATH-RATES.

WE have received a copy of the *Manchester Examiner* of the 12th inst., containing the report of a lengthy paper which Dr. Syson, medical officer of health for Salford, has lately read before the Manchester Statistical Society, "On the Comparative Mortality of Large Towns." The avowed object of the author of this paper was, "if possible, to prevent the public generally, and scientific men in particular, misusing the Registrar-General's returns." It is possible, of course, that there may be "scientific men" who need enlightenment upon the true value and significance of those returns, and we hope they will find it in Dr. Syson's paper. As regards some of the points which he has raised in opposition to the Registrar-General, they appear to us such as can only be dealt with exhaustively at greater length than is at all compatible with our space. Moreover, we have on a former occasion (THE LANCET of April 9th, 1870) expressed our opinion upon the broad features of the question at issue between the Registrar-General and his critics, and we observe nothing in Dr. Syson's paper to call for a modification of what we then said.

W. T. L.—We strongly disapprove of the distribution of such circulars among patients. But how is the practice to be prevented? It might be well to forward a copy to some of the gentlemen whose names are used as referees, in order to ascertain whether the author of the circular is justified in making this use of them.

THE SALE OF WINES AND SPIRITS BY GROCERS.

To the Editor of THE LANCET.

SIR,—Dr. Green wishes for information as to whether "the power lately given to grocers to sell wines and spirits has tended to the inducement of solitary secret drinking, especially amongst females of the middle and upper classes"?

Now, I think that, as far as the upper classes are concerned, this may be doubtful; but as regards the better part of the working class and tradespeople, it is beyond all question that the query must be answered in the affirmative. It may be taken as an axiom that in all matters of sensual gratification indulgence will be proportioned to opportunity. Opportunity makes the thief and the drinker as well, timid and secret at first, audacious and reckless afterwards. We all know how easily and powerfully the seductive tendency of alcohol roots itself in many women. The early Romans recognised this, and also its destructive effect on all virtuous principles, and therefore utterly prohibited females from tampering with wine. Under the laws of Romulus, the husband or relatives of an intemperate woman could put her to death.

One of the saddest facts of the present day is the rapid increase of intemperance amongst women. But this is only in the natural order of things. During the last ten years it has become the interest of every grocer and confectioner to push the sale of wine and spirits. A grocer, a very conscientious man, discussing the subject with a near relative, assured him that he had every reason to believe that if he would add the sale of those articles to his trade, he could increase his profits by £300 a year. Believing that such increase would be proportionately injurious to his customers, he refused the earnest and repeated solicitations of the agents of wholesale wine merchants. Others are not so scrupulous. A woman in humble circumstances, in a village in Cheshire, went to buy a quarter of a pound of tea. The grocer said to her, "If you would buy a pound, I would give you a glass of brandy." The woman answered, "I will buy a pound if you will give me the *price* of the brandy." "No," was the naïve reply; "I want you to taste my brandy, because I think that if you did you would like it, and *would then buy a bottle*"!

Usually, however, wine is the article recommended, especially at first. The bottles are ornamented with showy labels, are designated by catching titles, and are lauded as such marvels of cheapness as to be an act of kindness to recommend them, and a violation of comfort and economy to neglect the opportunity of purchasing. Fine old crusted port, only 1s. 8d. per bottle! Delicious sherry, a most strengthening and nutritious article, at the same extraordinarily low price! Thus are described the horrid black lethean decoctions compounded in London or some of our large towns; and the atrocious fabrications, conjured out of potato spirit, laboratory concocted ethers, and filthy Elbe water imported from Hamburg. Liquors of this kind are often recommended, and eagerly bought for unfortunate invalids!

Those who have anything like intimate acquaintance with Scottish domestic life must be well aware of the disastrous effects produced by the sale of liquors by grocers. It is not at all unfrequent for a bottle of whisky to be entered "To goods" in the shop book, in order to prevent the husband, on the one hand, from knowing that whisky has been purchased; and, on the other, to enable the grocer to recover in a court of law if necessary. This he could not do had the whisky been set down as spirits. Thus there is double duplicity practised on the husband. The wife drinks secretly, and he pays for the liquor when he supposes he is paying for food.

At the Social Science Congress, 1867, held at Belfast, this subject came up in discussion; and magistrates, clergymen, and medical men unanimously condemned the sale of liquor by grocers as the greatest evil associated with the Irish licensing system.

I fear that it is beyond all reasonable hope that the sale of alcoholic liquors by grocers can be at once abolished. But it is absolutely necessary that something be done to stop the disastrous effects produced by the present system. It is also absolutely necessary that, in the face of the increasing numbers of inveterate female inebriates, asylums as proposed by Dr. Dalrymple should be provided. Let those who help to make these drunkards contribute a fair share towards their recovery. Make the grocers and all others who sell liquors pay heavier duties, heavier house duties, license duties, wine and spirit duties. *Let the making of drunkards prove less profitable*, and we shall require fewer asylums, not merely for inebriates, but for all other lunatics. Need I add we shall also require fewer workhouses and prisons.

As this subject of drunkenness is speedily to come up for legislation, according to the promise of Mr. Bruce, and as we know that intemperance is, directly and indirectly, so powerful and prevalent a cause of disease, would it not be generous and patriotic if the profession used its great social and political power in aiding the effort now being made to get the licence laws amended?

Yours respectfully,

ROBT. MARTIN, M.D.,

Manchester, January, 1871. Hon. Sec. Licence Amendment League.

THE DIET OF DIABETICS AND THE WAR.

THE commercial relations of two countries like France and England are so intimate that it is not until an interruption has arisen in this respect, like that caused by the present war, that we are able to discern how these relations penetrate even to matters of the smallest details. No one would suppose, for instance, that diabetic patients are largely indebted to France for the supply of various substances used by them as articles of diet. Such is the fact, however, as Mr. Van Abbott has probably found out to his cost. The gluten bread and biscuits which he has so long supplied to diabetics were mainly obtained from France. In consequence of the French Government having prohibited the exportation of these articles, Mr. Van Abbott has been compelled to manufacture a substitute in the shape of gluten biscuits, with a sample of which we have been supplied. These have been freed, as much as possible, from starch, and consist almost exclusively of gluten bread. They seem to possess one considerable advantage over the articles previously introduced for diabetic patients, in that they are palatable, and might be consumed with relish by persons who are not the subjects of that complaint. They can, however, be made hard or soft according to the wish of the purchaser.

Dr. Edward Jay.—Thanks.

CONSTRUCTION OF MILITARY HOSPITALS.

THE *Medical Times* of Philadelphia of Jan. 2nd contains a copy of General Orders, just issued by the War Department, Washington, promulgating Circular No. 3 from the Surgeon-General's Office, which lays down the approved plans and specifications for small regulation hospitals. The original Circular is illustrated by numerous plates; but the notice in our contemporary only reproduces the front elevations of the hospitals described. We shall refer to the subject more fully hereafter. But we may remark that the plans of the American War Office seem to us to be very good. They do not materially differ from those adopted by our own War Office authorities for the construction of the regimental hospitals for cavalry and infantry regiments.

THE important communication of *Dr. Thomas Howden* (Haddington) shall appear in our next.

THE PUBLIC MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—At page 841 of THE LANCET for December 10th, one of your correspondents writes to you to say that the coming army examination will show the relative popularity of the medical department of the sister services—the army and navy. I do not think it will, for the reason that some of the candidates were, up to the time of the announcement that there would be no examination for the Indian service, candidates for the latter, and who cannot afford to wait on an uncertainty attending the India House arrangements for any future examination. Thus the number of candidates for February is unduly large, and is no measure of the popularity of the service for the purposes of strict comparison with the others (Indian and naval).

I venture to say that should it even now be announced that there will be an examination for the Indian service within a reasonable time, some of the present Queen's service candidates would withdraw, and wait for the former one. I would venture also to suggest that if this uncertainty about Indian medical service examinations continue, this service will be a loser as regards the attainments of the candidates. It would be preferable to this uncertainty if but a small number of appointments were *certainly* and *continuously* given at stated times. This would ensure a course of training for the competition for them by men of all others who generally become the most able and popular in the service—men who have money to go on studying after they have passed their examinations qualifying them to practise in civil life. The alternative is that, if the India Office call suddenly for candidates for its medical service, probably those unsuccessful at the Queen's would come forward, and men at the moment who would be "ready for anything," and with a result of perhaps not enough being up to the necessary standard, and a difficulty of filling up appointments.

Your obedient servant,
R. S. BATESON,
Surgeon, Bengal Army, Civil Surgeon, Umballa, Punjaub.
East India United Service Club, Dec. 15th, 1870.

Mr. W. R. Brunton.—There can be no doubt that the action of the inspector of nuisances ought to be wholly subordinate to the direction of the medical officer of health. That appears to us to be plainly indicated in the "Instructional Minute relative to the Duties and Qualifications of Officers of Health in Districts under the Public Health Act, 1848," which was issued by the late General Board of Health in 1855. Therein it is stated: "The officer of health is appointed first, in order that *through him* the local sanitary authority may be duly informed of such influences as are acting against the healthiness of the population of his district, and of such steps as medical science can advise for their removal," and so on. It is, however, enacted in the 37th section of the Public Health Act of 1848 that local Boards are to make "bye-laws for regulating the duties and conduct of the several officers and servants" employed by them; and it would seem that it is under such bye-laws the Redditch inspector justifies his action in the case before us. It is, or should be, the duty of the nuisance inspector to report the existence of nuisances as facts to be dealt with remedially by the medical officer of health; and when the former is prompted to go beyond his province in discussing theories of causation and remedy, he should confine himself to privately representing his views to the medical officer. Mr. Brunton was, we think, justified in taking exception to the nature and tone of the nuisance inspector's report, as appearing to reverse the true position in which they stand one to another and to the local Board.

C. W. J.—We consider the first-named practitioner entitled to his fee under the circumstances.

NEGLECT OF VACCINATION.

AT a recent meeting of the St. Asaph guardians it was stated that there were 255 unvaccinated children in the union, and that "owing to some alteration which had taken place in regard to the several vaccination districts, and to an order received from the Privy Council, those who were not now vaccinated could not be so until the month of April next." If true, 'tis pity; but we hope there is some misunderstanding about this. We are glad to find that the guardians "expressed very decided dissatisfaction at the present state of matters," and from this it is reasonable to infer that means will be found to obviate the difficulties, real or imaginary, which impede the proper working of the Vaccination Act at St. Asaph. As an illustration of the negligence but too commonly displayed in reference to this important matter of vaccination, the Chairman of the St. Asaph guardians, inquiring of the workhouse master whether there were any unvaccinated children in the house, received for answer that "he did not know, but he thought there were one or two." This appeared to the Chairman to be "a queer answer," which is just what it strikes us as being.

X., a Constant Reader, will find Jamaica healthy enough for prudent residents. The expense of living is not great, and the prospects of duly-qualified practitioners are as good as in any of her Majesty's colonies. Our correspondent should apply to the authorities indicated in our annotation.

"A LARGE ORDER."

IN our paragraph, under the above heading, in our last impression, the quinine stated to be used for pills for the sick and wounded should have been valued at between £1500 and £2000, not £1000; and it should have been added that Messrs. Savory and Moore, who received the order, prepared the whole themselves, Messrs. Cox and Co. simply doing the mechanical portion, that of cutting and rounding the pills.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Rutherford; Prof. Maclean, Netley; Dr. Thudichum; Dr. Vance, Plaistow; Mr. Clover; Dr. Leney, Strabane; Mr. Morgan; Dr. Macleod, Glasgow; Dr. Grant; Mr. Harris; Dr. Joyce, Rolvenden; Mr. Wilton; Dr. Howden; Mr. M'Clean, Lyndhurst; Mr. Mackintosh; Dr. Meymott, Ludlow; Mrs. John Wood; Dr. Jefferies; Mr. R. Markham; Dr. O'Neill, Lincoln; Dr. Rich, Ashford; Mr. Stiles; Mr. Newton; Mr. Ansell; Mr. Lambert; Rev. W. G. Davies, Abergavenny; Mr. Hemming; Mr. Aubrey; Dr. Muter; Mr. Mackenzie; Mr. Neale; Dr. Gregor; Mr. Barber; Dr. King, Castleford; Dr. Jameson, Scarborough; Mr. Mountcharles, Boston; Dr. Farrow, Ingham; Dr. Dick, Harrington; Mr. Thorpe, Hunslet; Mr. Lemon; Mr. Gilbert, Accrington; Dr. GreatRex, Walsall; Mr. Jebb; Mr. Clarke; Dr. Dickson; Mr. Foster; Mr. Davies; Dr. Jones, Dinas; Mr. Farrar, Brighouse; Mr. Monckton, Hurstpierpoint; Dr. Clark, Walsall; Mr. Bellamy; Mr. Karn; Mr. Hales; Mr. Empson; Mr. Trotter; Mr. Horsfall, Wakefield; Dr. Wilson, Belfast; Dr. Lowe, King's Lynn; Dr. Macdonald, Haswell; Mr. Gibbs, Aylesbury; Mr. Woodman; Dr. Hopkins, Llantrissant; Dr. Thompson, Leamington; Dr. Major, Hungerford; Mr. Webb; Dr. Gill, Dover; Dr. Lowe, Lincoln; Mr. Taylor, Bradford; Dr. Whitehead, New York; Mr. Hope; Mr. Davis; Dr. Wiltshire; Dr. Harmer, Hawkhurst; Mr. Morton, Sheffield; Dr. Ellery, Axminster; Mr. Casson, Hull; Dr. Hardesty, Lochie; Dr. Sommerville, Edinburgh; Mr. Grant; Mr. Harman; Mr. Shepherd, Wigan; Dr. Felce; Mr. Manning; Dr. Wise, Castletown; Mr. Mercer; Mr. Smith, Aberdeen; Dr. Kidd, Armagh; W. W.; Medicus; François; Juvenile, Leicester; H.; C. W. S.; A Staff Surgeon, R.N.; Delta; X., a Constant Reader; Querist; A Subscriber to THE LANCET of Twenty Years; A Student of Hygiene; M.D., L.R.C.P.; Faith, Hope, and Charity; M.D. (not in Practice); H. T.; One of the Senior Rank; The Committee of the Great Northern Hospital; A. K.; Candidate; A Voice from the Ranks of the Army; Q.; &c. &c.

Malvern News, Preston Guardian, Woodhall and Claffin's Weekly, Liverpool Daily Courier, Philadelphia Medical Times, Wolverhampton Chronicle, Buxton Herald, Manchester Examiner, Southport Visitor, Hampshire Telegraph, Braintree Advertiser, Lincoln Gazette, Sheffield Telegraph, Harrow Gazette, Bucks Advertiser, Darmstadter Zeitung, Marylebone Mercury, Scotsman, Spalding Free Press, and *Newcastle Daily Journal* have been received.

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